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SIC 9/17/08
~~Willamette~~
ITRI
Grants

PORTLAND CONTAINER REPAIR CORP.
9449 N. Burgard Way Portland, OR 97203
Phone 503-286-5961 Fax 503-286-9342

March 16, 1999

Linda Wakefield
Schnitzer Investment Corp.
3200 NW Yeon Avenue
Portland, OR. 97210

Dear Linda:

We have received a Site Assessment Review Notice from the D.E.Q. covering the property on N. Burgard Way.

I have enclosed a copy of the notice and our response. We included a copy of the assessment done by the Quality Group in 1994 for parcels 4, 5 & 6 in our response. This is a report that you provided us with prior to our lease and have not included a copy with this correspondence.

We don't believe that our use of the property is causing pollution or contamination to the river. In any event, we intend to cooperate fully and keep you informed as things progress.

Sincerely,

Robert W. McClane
Portland Container Repair Corp.

RWM/lmm

Enclosures

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Northwest Region
2020 SW Fourth Avenue
Suite 400
Portland, OR 97201-4987
(503) 229-5263 Voice
TTY (503) 229-5471

March 2, 1999

Mr. Robert W. McClane
Portland Container Repair Corporation
PO Box 98951
Seattle, WA 98198

Re: Site Assessment Review Notice
Portland Container Repair Corporation
9449 N Burgard Way
Portland, Oregon 97203
Multnomah County

Dear Mr. McClane:

The Department of Environmental Quality (DEQ), Site Assessment Program is performing a preliminary review of file information for the Portland Container Repair Corporation facility located at 9449 N Burgard Way in Portland, OR. The Site Assessment Program is concerned with properties with known or potential environmental contamination. This review is being performed under Oregon's Environmental Cleanup Law Oregon Revised Statutes (ORS) 465.245. Our records indicate that Portland Container Repair Corporation is an operator at the site. Please contact me if that information is not correct.

Based upon initial sampling results from a river sediment quality study conducted within Portland Harbor during the fall of 1997 by EPA and DEQ, and a review of available records, your site has been identified as a potential source of contamination to the river. EPA and DEQ collected near-shore sediment samples from 151 sampling locations along a six mile stretch of the Willamette River between the mouth of Multnomah Channel (at River Mile 3.6) and Swan Island (at River Mile 9.2). Samples were analyzed for metals, petroleum constituents,

polychlorinated biphenyls (PCBs), pesticides, dioxins, and other volatile and semi-volatile organic constituents. Elevated concentrations of these contaminants were found at several locations within the Harbor. Some of the sediments contain concentrations of organic and inorganic contaminants which could potentially be harmful to fish, wildlife, or human health.

Properties that are located near areas where sediment contaminants were detected at elevated concentrations, or at which historical activities suggest a potential source of contamination, are being further examined through DEQ's Site Assessment Program. Sites along the Willamette River may contribute to sediment contamination through direct discharges to the river or nearby streams or stormsewers, through nonpoint surface water runoff, or through discharges of contaminated groundwater.

We want to give you an opportunity update our existing information, and to provide any information which you think we may not be aware of, especially any recent investigations or clean-up reports we may not already have. DEQ will use the information you provide, together with our other information, to determine if your facility will require further assessment. Your assistance in gathering this information will help to ensure an accurate and thorough review of the site.

Enclosed is an outline of the information that we would find most helpful. We ask that you provide the requested information for the site listed above to the best of your knowledge.

To ensure a timely review of your site, please send the requested information within two weeks of the date postmarked on the envelope. If we do not hear from you, we will proceed with our review of the information we already have. Please send the information to:

Steve Fortuna, Remedial Action Specialist
Site Assessment Program
Oregon Department of Environmental Quality, Northwest Region
2020 NW Fourth Avenue, Suite 400
Portland, OR 97201-4987

Because ORS 465.330 requires recovery of state expenses associated with remedial actions, DEQ will track its costs in reviewing your facility. DEQ will recover those costs if we determine that further action is needed to protect public health or the environment from on-site releases of hazardous substances. Costs

may be recovered from persons defined as liable under Oregon Revised Statutes (ORS) 465.255. At the completion of the review we will inform you of DEQ's decision regarding further action and what, if any, costs will be recovered.

If you have any questions regarding this letter or the Site Assessment process, please feel free to contact Janelle Waggy at (503) 229-5741.

Sincerely,

Steve Fortuna, Remedial Action Specialist
Site Assessment Program
DEQ Northwest Region

Enclosure: Site Assessment Information Request Outline

cc: Gil Wistar, Coordinator, Site Assessment Program
Jennifer Sutter, Project Manager, Portland Harbor Sediment Project

PContainer.ltr (3/99)

SITE ASSESSMENT INFORMATION REQUEST

Please address each item as completely as possible. When you cannot address a particular item because of a lack of information, please state so.

1. PROVIDE THE FOLLOWING BACKGROUND INFORMATION:

   a. Facility name and address.

   b. Facility owners and operators names, titles, addresses, and phone numbers.

   c. Property owners (if different from facility owner/operator) name, address, and phone number.

   d. Current use of site, and year those operations began at the site.

   e. Past use of site: include all you know about previous owners and users of site, and associated dates.

   f. Size of site (in acres or square feet) and tax lot numbers.

   g. Site security (is the site *completely or partially fenced, patrolled,* etc.?).

   h. Land uses immediately surrounding the site boundaries. An example of the type of information being sought: *"The site is mostly surrounded by industrial [or commercial, or agricultural] land, but a small residential area is located ¼ mile to the northwest.....",* etc.

2. PROVIDE A SITE MAP WITH THE FOLLOWING ITEMS IDENTIFIED:

   a. Building names and their functions (past and present).

   b. All chemical and waste storage and disposal areas (e.g., does the site have *buildings, ponds, ditches, landfills, waste piles, tanks, dry wells, drainfields,* etc.); include inactive or abandoned areas.

   c. Outdoor process areas.

   d. Storage tanks, both underground and above ground (*number, size, contents, active, inactive, decommissioned in place,* etc.).

   e. Waste treatment systems (including active, or inactive, drywells, drainfields, septic tanks).

   f. Any on-site wells (*water supply, monitoring, dry wells, abandoned wells*).

3. PROVIDE THE FOLLOWING CHEMICAL/WASTE HANDLING INFORMATION:

   a. All chemical products used or stored at the site, past and present (include any *fuels, solvents, oils, pesticides,* etc.).

(OVER)

b. All waste products generated or stored at the site (include any *waste solvents or oils, filter cake, spent plating solutions, metal grindings, spent sandblast shot,* etc.).

c. Approximate volumes of chemicals used and wastes generated per year, and maximum volume kept on-site.

d. Any on-site chemical or waste-treatment systems (include any *flocculation/filtration, incineration, chemical or physical treatment, volume reduction,* etc.).

e. Information on all past and present chemical and waste storage and disposal areas; include information on size, type, current or former contents, and condition of each. Examples of this type of information might include:

"There are two 3,000-gallon steel underground tanks on-site; each presently contains about 500 gallons of gasoline. These were installed in 1988, and are thought to be in good condition. They have not been tested."

"Between 1942 and 1971, waste sandblast grit was buried in a series of trenches located 50 to 150 yards north of the main shop. The trenches were unlined and measure approximately 2 feet wide, 4 feet deep, and 30 feet long".

f. Type, quantity, and destination of all wastes removed from site. An example of the type of information being requested: *"Since 1984, 2 tons of metal wastes have been landfilled at the county dump site each month; 55 gallons of used benzene has been recycled each month through Bob's Solvent Recovery Company of Butte Montana...",* etc.

g. Any spills or other releases of chemical substances (including petroleum products) that have occurred at the site during your operation or ownership.

h. Any information you have about chemical substances used, stored, or released at the site by prior owners or operators.

4. PROVIDE THE FOLLOWING PERMIT INFORMATION:

a. Identify all existing or expired regulatory permits. For each, provide information on the type of permit (such as *NPDES, RCRA Interim Status,* etc.), regulating agency (such as *federal, state, local sewerage agency*), and issue and expiration dates.

5. PROVIDE THE FOLLOWING SAMPLING/CLEANUP/INVESTIGATIVE INFORMATION:

a. Describe all environmental investigations/sampling/monitoring performed at site. Provide investigative reports/sampling results, if any.

b. Describe any soil excavations or removals, spill cleanups, groundwater treatment, etc. that may have been performed at site.

(END)

PORTLAND
CONTAINER
REPAIR CORP.
9449 N. Burgard Way Portland, OR 97203
Phone 503-286-5961 Fax 503-286-9342

March 10, 1999

CERTIFIED MAIL
P-564 870 344

Mr. Steve Fortuna,
Remedial Action Specialist
Site Assessment Program
Oregon Department of Environmental Quality
Northwest Region
2020 NW Fourth Avenue, Suite 400
Portland, OR 97201-4987

Dear Mr. Fortuna:

Please find enclosed our response to the site assessment information request received by our firm on March 8, 1999. We hope you will find our response complete and containing the information you need for a preliminary review of the site.

Please contact myself at (253) 272-7426 or Andy Millican in Portland at (503) 286-5961 with any questions.

Very Truly Yours,

Robert W. McClane
President
Portland Container Repair Corp.

RWM/lmm

cc: Linda Wakefield
Schnitzer Investment Corp.

SITE ASSESSMENT INFORMATION

1. BACKGROUND INFORMATION

A. FACILITY NAME AND ADDRESS:
PORTLAND CONTAINER REPAIR CORP.
9449 NORTH BURGARD WAY
PORTLAND, OREGON 97203

B. FACILITY OWNERS:
MORGAN TRUCKING, INC
P.O. BOX 98951
SEATTLE, WA 98198
PRES. ROBERT W. MCCLANE
PHONE: 253-272-7426

ANDREW R. MILLICAN
(b) (6)
PORTLAND, OREGON 97212
PHONE: (b) (6)

FACILITY OPERATORS:
ROBERT W. MCCLANE PRESIDENT
PORTLAND CONTAINER REPAIR CORP.
P.O. BOX 98951
SEATTLE, WA 98198

RESIDENCE:
(b) (6)
FEDERAL WAY, WA 98003
(b) (6)

LOLA M. MCCLANE SEC./TRES.
PORTLAND CONTAINER REPAIR CORP.
P.O. BOX 98951
SEATTLE, WA 98198
253-272-7426

(b) (6)
FEDERAL WAY, WA 98003
(b) (6)

ANDREW MILLICAN V.P. & GEN. MGR.
PORTLAND CONTAINER REPAIR CORP.
9449 NORTH BURGARD WAY
PORTLAND, OREGON 97203
PHONE: 503-286-5961

(b) (6)
PORTLAND, OREGON 97212
(b) (6)

C. PROPERTY OWNER
SCHNITZER INVESTMENT CORP.
LINDA WAKEFIELD VICE PRES.
3200 N.W. YEON AVE.
P.O. BOX 10047
PORTLAND, OREGON 97210
PHONE: 503-224-9900

D. CURRENT USE OF SITE:

STORAGE AND REPAIR OF OCEAN SHIPPING CONTAINERS.

OPERATIONS BEGAN ON LOTS 4,5, AND 6 IN 1995, AND ON LOTS 7 AND 8 IN 1998.

E. PAST USE OF SITE:

WE BELIEVE THE PROPERTY AT ONE TIME WAS A SHIP YARD AND MAY ALSO HAVE BEEN USED TO STORE SCRAP METALS.

F. LOTS 4,5 AND 6 ARE APPROXIMATELY 11.689 ACRES, AND LOTS 7 AND 8 ARE 6.757 ACRES OF BURGARD INDUSTRIAL PARK.

G. THE PROPERTY IS COMPLETELY FENCED.

GATES ARE PADLOCKED AND THE BUILDING IS ALARMED ON EVENINGS AND WEEKENDS. WE HIRE THE SOUND SECURITY COMPANY TO PATROL THE PREMISES DURING THE OFF HOURS.

H. LAND SURROUNDING THE SITE BOUNDARIES IS USED AS INDUSTRIAL OR COMMERCIAL.

2. SITE MAP

WE HAVE ENCLOSED A SITE MAP TO IDENTIFY ITEMS REQUESTED, AND ANOTHER LARGER SITE PLAN OF THE SURROUNDING AREA TO USE AS A REFERENCE.

THERE ARE NO UNDERGROUND STORAGE TANKS, DRY WELLS OR WASTE TREATMENT SYSTEMS ON THE PROPERTY.

3. CHEMICAL/WASTE HANDLING INFORMATION:

A. CHEMICAL PRODUCTS USED AND STORED ON SITE.

DIESEL FUEL	GASOLINE
MOTOR OIL	USED MOTOR OIL
90 WT. OIL	HYDRAULIC FLUID
AUTOMATIC TRANS. FLUID	PAINT
PAINT THINNER	SOLVENT
ANTI-FREEZE	CHEM CLEAN
ZYMEX/ENZYME CLEANER	PROPANE GAS
MULTI PURPOSE GREASE	OXYGEN GAS
ACETYLENE GAS	ARGON GAS
75/25 ARGON/CO2 GAS	FREON R 12 GAS
FREON R 22 GAS	FREON R 134A GAS

B. WASTE PRODUCTS GENERATED OR STORED ON SITE:

1 - 55 GALLON BARREL USED MOTOR OIL.
UP TO 9 GALLONS PARTS WASHER CLEANING SOLVENTS.
OIL WATER MIX, STORED IN OIL SEPARATION TANK OF STEAM CLEANER.
1 - 55 GALLON BARREL OF USED ANTI-FREEZE.
FREON IS RECOVERED AND REUSED.

C. APPROXIMATE VOLUMES OF CHEMICALS USED AND WASTES GENERATED POR YEAR AND MAXIMUM KEPT ON SITE.

CHEMICAL PRODUCT	APPROXIMATE VOLUME	AVERAGE CONSUMPTION
DIESEL FUEL	500 GAL. IN MOBILE FUEL TRK	1300 GAL./MO.
GASOLINE	4 X 6 GAL CONTAINERS	50 GAL./MO.
MOTOR OIL	6 X 1 GAL. CONTAINERS	25 GAL./MO.
USED MOTOR OIL	1 X 55 GAL. BARREL	25 GAL./MO.
90 WT. OIL	1 X 5 GAL. PAIL	10 GAL./MO
HYDRAULIC FLUID	1 X 55 GAL. BARREL	10 GAL./MO.
AUTO. TRANS. FLUID	1 X 55 GAL. BARREL	55 GAL./YR.
PAINT	75 GAL. IN 1 AND 5 GAL. PAILS	20 GAL./MO.
PAINT THINNER	1 X 5 GALLON PAIL	10 GAL./MO.
SOLVENT	5 GAL. IN PARTS WASHER	9 GAL./6 MO.
ANTI-FREEZE	1 X 55 GAL. BARREL	55 GAL./YR.
ZYMEX/ENZYME CLEANER	2 X 5 GAL. PAILS	10 GAL./YR.
CHEM CLEAN	1 X 55 GAL. BARREL	55 GAL./YR.
MULTI PURPOSE GREASE	48 X 1 LB. TUBES	12 TUBES/MO.
PROPANE GAS	500 GAL. IN STATIONARY TANK	750 GAL./MO.
OXYGEN GAS	6 X 337 CU. FT. CYLINDERS/ 3 X 125 CU. FT. CYLINDERS	100 CU. FT./MO.
ACETYLENE GAS	10 X 125 CU. FT. CYLINDERS	500 CU. FT./MO.
ARGON GAS	1 X 337 CU. FT. CYLINDERS/ 1 X 125 CU. FT CYLINDER	250 CU. FT./MO.
75/25 ARGON/CO2 GAS	3 X 337 CU. FT. CYLINDERS/ 4 X 125 CU. FT. CYLINDERS	500 CU. FT./MO.
FREON R 12 GAS	2 X 30 LBS. CONTAINERS	10 LBS./MO.
FREON R 22 GAS	8 X 30 LBS. CONTAINERS	20 LBS./MO.
FREON R 134A GAS	4 X 30 LBS. CONTAINERS	20 LBS./MO.

D. THERE ARE NO ON SITE CHEMICAL OR WASTE-TREATMENT SYSTEMS.

E. PAST AND PRESENT CHEMICAL AND WASTE STORAGE AND DISPOSAL SITES.
PLEASE SEE ITEMS A, B, & C OF THIS SECTION FOR PRESENT STORAGE INFORMATION.

F. TYPE, QUANTITY AND DESTINATION OF ALL WASTES REMOVED FROM SITE.
ALL WASTES REMOVED FROM SITE.

USED OIL IS CAPTURED IN ONE 55 GALLON BARREL, WHEN THE BARREL IS FULL IT IS GIVEN TO A NEIGHBORING BUSINESS TO BURN IN A USED OIL BURNING HEATER OR , RECYCLED AT THE OIL RE-REFINING CO.

PARTS WASHER CLEANING SOLVENTS ARE RECYCLED THROUGH SAFETY KLEEN CO. THE PARTS WASHER IS SERVICED EVERY 6 MONTH AND GENERATES APPROXIMATELY 9 GALLONS OF SOLVENT.

THE OIL SEPERATOR TANK FOR THE WASH RACK IS SERVICED AS NEEDED. IT WAS SERVICED THIS YEAR FOR THE FIRST TIME SINCE INSTALLATION IN 1995. THIS GENERATED 766 GALLONS OF OIL-WATER MIX FOR RECYCLING THROUGH SAFETY KLEEN. USED ANTI-FREEZE IS CAPTURED IN ONE 55 GALLON BARREL AND RECYCLED THROUGH SPENCER ENVIRONMENTAL WHEN THE DRUM IS FULL.

G. THERE HAVE BEEN NO SIGNIFICANT SPILLS OR RELEASES OF CHEMICAL SUBSTANCES DURING OUR OPERATIONS ON THE PROPERTY.

H. WE HAVE ENCLOSED AN ENVIRONMENTAL SITE ASSESSMENT DONE BY QUALITY GROUP, PRIOR TO OUR TENANCY.

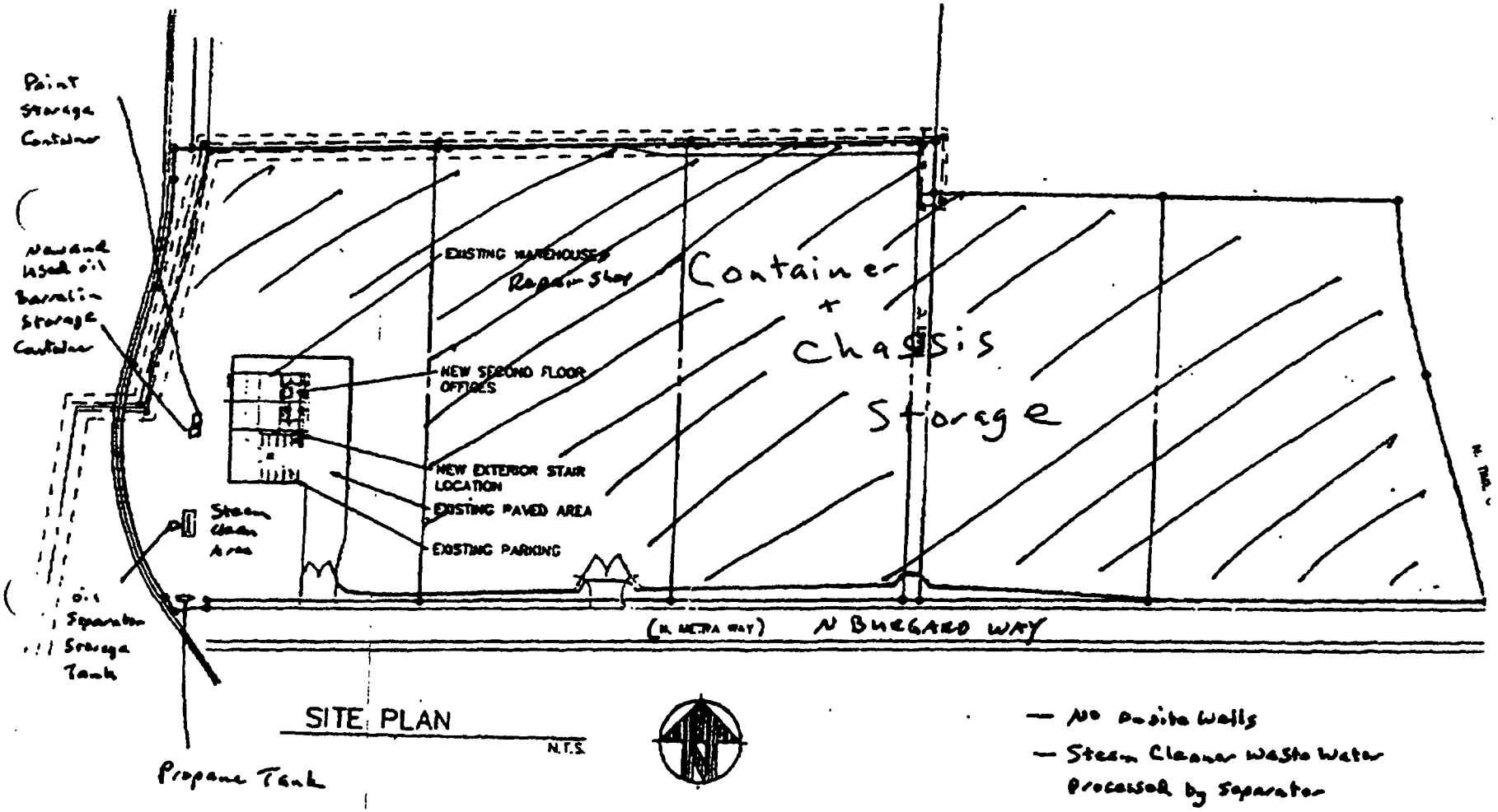
4. PERMIT INFORMATION

A. WE ARE NOT AWARE OF ANY REGULATORY PERMITS.

5. SAMPLING/CLEAN UP/INVESTIGATION

A. WE HAVE ENCLOSED A COPY OF OUR STORM WATER POLLUTION PREVENTION PLAN THAT WAS INITIATED IN 1997.

B. THERE HAS BEEN NO SOIL EXCAVATIONS OR REMOVALS, SPILL CLEAN UPS OR GROUNDWATER TREATMENT PERFORMED ON THE SITE DURING OUR TENANCY.



SITE PLAN

N.T.S.

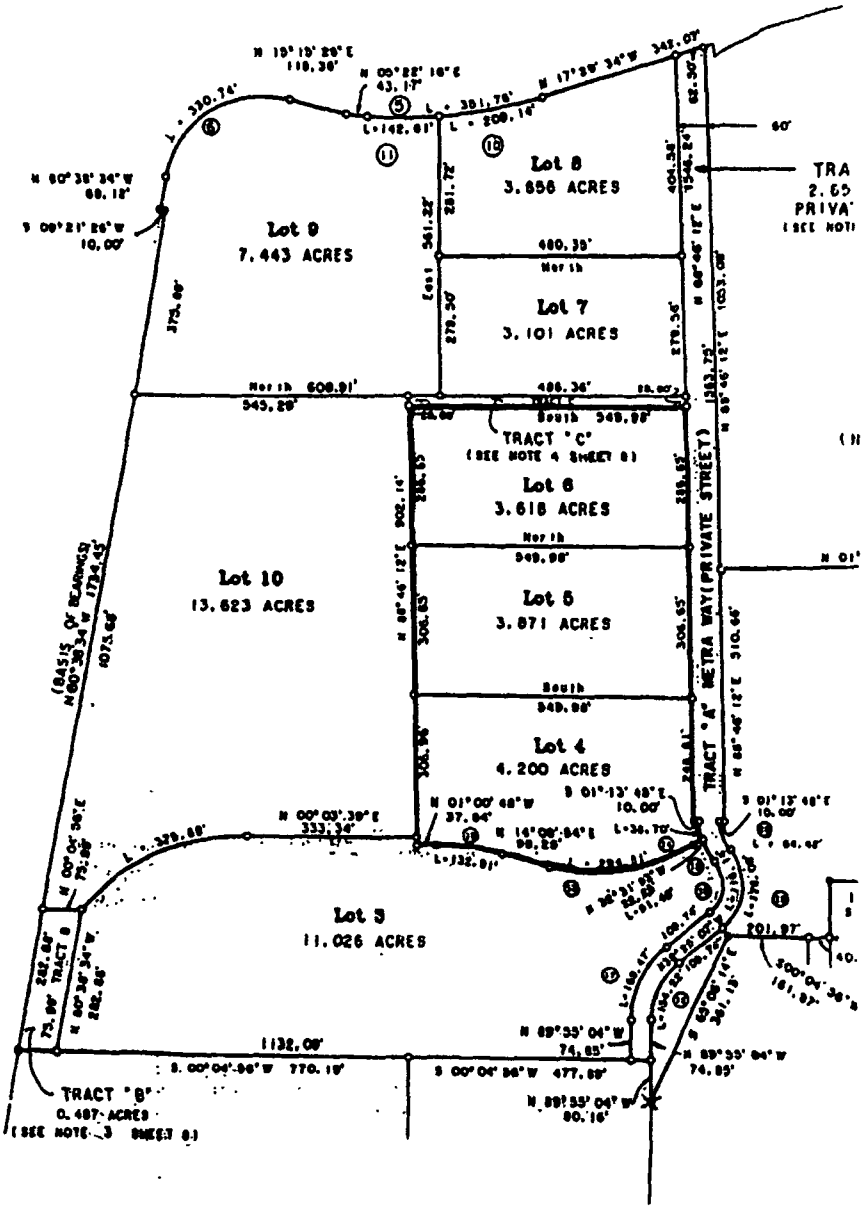
— No Onsite Wells

— Steam Cleaner Waste Water Processed by Separator

INTERNATIONAL TERMINALS SUBDIVISION

SITUATED IN
A PART OF THE WILLIAM GAITON D.L.C.
and
A PART OF THE JAMES LOOMIS D.L.C.,
SECTION 35, TOWNSHIP 1 NORTH, RANGE 1 WEST, W.M.,
CITY OF PORTLAND, COUNTY OF MULTNOMAH
and
STATE OF OREGON.

Pre
Jim Waddi
1750 SW
Portla
(503



SCHN00014703

PORTLAND CONTAINER

West Yard
9449 N. Burgard Way Portland, OR 97203
Phone 503-286-5961 Fax 503-286-9342

East Yard
12001 N Portland Rd Portland, OR 97203
Phone 503-286-2276 Fax 503-286-8370

Storm Water Pollution Prevention Plan (SWPPP) prepared for the Portland Container Repair facilities in accordance with local requirements. This SWPPP identifies potential sources of storm water pollution and prescribes a series of best management practices (BMPs) or control measures to be implemented to minimize the discharge of pollutants in storm water runoff.

The objectives of the SWPPP are:

To eliminate the discharges of unpermitted process wastewater, domestic wastewater and non-contact cooling water to storm drainage systems

Implement Best Management Practices (BMPs) to identify, reduce and prevent the pollution of storm water

To prevent violations of surface water quality, ground water quality and sediment management standards

Key SWPPP Requirements

- Pollution Prevention Team must be designated
- Record of significant spills/leaks must be maintained
- Control measures must be implemented
- Visual facility inspections must be conducted and inspection logs maintained
- Employees must be informed of the components of the SWPPP

Inspections and Monitoring

Two inspections per year will be made and documented. One during the wet season (Oct 1 - Apr 30) and one during the dry season (May 1 - Sep 30). This plan is available to all government organizations and will be retained on site, or within reasonable access.

Good Housekeeping

Good housekeeping practices are intended to maintain potential pollution source areas in a clean and orderly condition. Appropriate good housekeeping measures are partially prescribed in the following BMP's.

Operational BMP's :

- Keep lid on garbage dumpster closed
- Remove and dispose of 5 gallon buckets in storage areas
- Educate employees on spill response procedures
- Keep all 55 gal drums in covered storage area
- Maintain 55 gal drums on spill containment pad
- Routinely clean out oil separator
- Routinely clean out drainage grates and catch basins
-

Source Control BMP's:

- Keep shop floors free of greases and oils via dry sweep removal
- Keep in place absorbent pad on top of 55 gal barrels
- Install back pressure cutoff nozzles on fuel tanks
- For work areas, provide dry clean up materials and covered disposal pail
- For fueling areas, provide dry clean up kits and oil/water absorbent pads
- Eliminate unnecessary equipment washing
- Educate employees on avoiding contaminating areas
- Use wash pads exclusively for cleaning equipment
- Place absorbent pads on ground prior to fueling gensets to avoid spillage
-

Treatment BMP's:

- Clean up grease and oil spills with absorbents immediately and dispose
- Install absorbent pad in storm drain to catch oils from truck traffic
-

Employee Training

Effective management of storm water pollution will require all facility staff to be alert to those conditions that could cause pollution. The storm water Pollution Prevention Team is responsible for ensuring that all existing operations staff at the facility understand the components of the SWPP, how it is implemented and their role in contributing to the effectiveness of the storm water control measures. The employee training will be integrated with the facility's existing training and safety program.

The following subjects will be addressed in training:

- Objectives and requirements of the SWPPP
- Spill prevention, response and reporting procedures
- Good housekeeping practices
- Proper fueling and storage procedures .

Inspections

The Pollution Prevention Team will conduct routine visual inspections of the facility for the evidence of, or the potential for, pollutants entering the drainage system. Routine visual inspections will ensure that all elements of the SWPPP are in place and working properly. The visual inspection will consist of a routine site walk-over to confirm that the selected BMP's are functioning properly and to correct obvious conditions that may contribute to runoff contamination. At a minimum there will be two inspections per year.

Site Compliance Evaluation

In addition to the routine visual inspections, a comprehensive site compliance evaluation will be conducted annually. The objective of the evaluation is to assess the overall effectiveness of this SWPPP and to modify/improve the SWPPP as appropriate.

The annual compliance evaluation of the facility will include the following elements:

- Verify that source and structural controls have been implemented, are being maintained and are effective in controlling storm water pollution

- Determine if improvements or additional control measures are needed

- Inspect the condition of spill response equipment

- Evaluate results of routine inspections

Based on the findings of the annual site evaluation, the SWPPP will be modified to reflect changes in the conditions at the facility which could significantly affect storm water runoff. In the event of changes, appropriate implementations will be made in a timely manner.

SHIP CONSTRUCTION

MATERIAL

SUPERVISED

BY

ROBERT M. HAMILL — ADMINISTRATIVE ASSISTANT

HALLARD M. BAILEY — ASSISTANT COORDINATOR IN CHARGE OF INSTRUCTIONAL MATERIAL

FOR

PORTLAND PUBLIC SCHOOLS
DEPARTMENT OF VOCATIONAL EDUCATION
NATIONAL DEFENSE TRAINING

PORTLAND, OREGON

A.B.C. OF SHIP CONSTRUCTION

LESSON OUTLINE

LESSON I

INTRODUCTION TO YARDS

In our discussions of Ship Construction, let us first consider the importance of the job we are doing. To some of us, it might seem that we are just building boats. We come to work, remain on the job for our eight hours, and then go home. We are doing far more than that, however. We are building ships to help win the war without the use of cargo carrying vessels, our forces across the seas would not have the reinforcements of men, planes, tanks, trucks, food, supplies, and the many vital necessities upon which these campaigns depend.

In order to put ships out in record time through "Mass Production" methods, each and every man must be considered and used as a cog in the wheel of production. For this reason, each man should be specialized in his line of duty the same as he would be in the large automobile factories and aircraft plants throughout the country.

To learn the system of the Hull Control Department, the Plate Shop, the Sub-Assembly, the Assembly Platform, the Ways, and the Outfitting Dock, it would take days, weeks, and even months. Therefore, we are giving these classes to teach all the men the same system. These classes are held primarily to teach the system, and not the detail. Because the man can be broken in to his detail quicker than to the system, these classes will not deal with these specific details, leaving them to be considered at a later stage in the man's training.

YARD CONSTRUCTION

Where shipways are not available the first thing that must be done is to construct a ship yard. A completed example of emergency shipyard construction is the one built by the Oregon Shipbuilding Corporation. A brief history and description of this yard will acquaint the learner with the facilities which he will later observe in this or any other shipyard.

The first phase of yard construction was to bring the low lying land up to grade. Dredges working in the Willamette River pumped sand from the launching area into a 50-acre tract for a fill averaging 12 feet high. Bulldozers and carry-alls

THIS IS HOW THE YARD LOOKED BEFORE STRUCTURES WERE ERECTED

cut down an old levee and a few high spots to grade. Simultaneously with the grading, construction of a two-story office building was started. A forest of round wood piles, 35 to 60 feet long, were driven as foundation for the groundways. A total of 30,000 round wood piles were driven in the yard area. A two-story wood mold loft and template storage building measuring 130 feet by 260 feet in plan was completed within 8 days. The roof of this building is supported by laminated bow string wood trusses with a span of 130 feet and placed 20 feet on centers. Split rings and other modern timber connectors were used to get maximum benefit from use of the wood members.

In the mold loft, loftsmen develop actual size patterns of light wood from drawings prepared and furnished by the U. S. Maritime Commission. The immense clear floor area unencumbered by columns provides essentially a huge drafting table where outlines of templates are drawn full scale. Hull plates molded to the ship's outline and deck plates having both crown and shear call for a development that can only be obtained by skilled craftsmen. Simplicity and less detail are involved in welded shipbuilding over riveted construction but unequal and unpredictable expansion and contraction is still a problem. The mold loft is alongside of the plate and angle shop making handling and transportation of the precious wood templates safe and convenient.

CUTTING STEEL PLATE IN THE PLATE SHOP WITH A TRAVELING TORCH

The plate shop, a steel frame building with a corrugated iron exterior, measures 170 feet by 500 feet in plan. An assembly bay contiguous to the shop is 90 feet by 640 feet. Steel plates for ships arriving from the east by railroad are racked up in storage just outside of the building. Unloading of cars and handling

of plates into the shop is done by one of three 40-ton whirly cranes. Whirlies are mounted on a movable steel gantry frame, many of the members of which are connected by Dardelet bolts instead of riveting. Maximum salvage of the steel will be possible if the gantries are dismantled and erected on other tracks. Booms on these Washington Iron Works cranes are 125 feet long. Travel speed parallel to the railroad running through the rigid frame portals of the gantry is 2 miles per hour. Electric power is furnished through a large insulated cable mounted on a motor-driven reel that takes in or pays out as the rig is moved. Within the plate shop, 10-ton, 45-foot span overhead bridge cranes move the 1/2" to 7/8" plates from machine to machine. The travograph, a gas flame cutting device made by the Linde Air Products Company, consists of a pantograph arrangement with a pointer on one end that follows the complex outline of the templates furnished by the loftsmen and several torches on the other arm that cuts 5 or 6 steel plates at one time. Cold rolling of plates up to a maximum of 7/8" thick and 32' in length is done on power rollers. Hot forming of frames is done by soaking channels or angles in a 55-foot long oil fired furnace and subsequently bending to shape on a cast iron bending slab. The hot member is held in place by steel pins into the waffle-like surface of the bending slab and forming is done with air rams and hand sledges. Other shop equipment consists of punches, gang drills, shears, gas and electric welding outfits. Two ton electric driven movable wall cranes with a reach of 18 feet facilitates handling hot or heavy pieces. When the pieces have been properly tailored, partial assemblies are made up in the assembly bay. Here two overhead bridge cranes, span 87 feet, capacity 10 tons, do their share of weight lifting and expedite production.

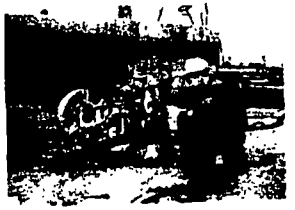
CUTTING SEVERAL PLATES BY TORCHES MOUNTED ON TRAVOGRAPH.

Other buildings in the yards include a forge, pipe and machine shops, as well as general stores and fitting stores, warehouses and a superintendent's building. Bituminous paved roadways connect all buildings and railroad spurs and sidings extend to delivery points of heavy material. Electricity for power and flood lighting at night is supplied by Bonneville Power Administration. The permanent underground

distribution system in the yards promotes safety and makes the installation less vulnerable to sabotage. The entire layout is made with the idea of continuous mass production on an assembly line basis so that raw materials entering at one end are fabricated and processed with a minimum of lifting and moving until they are placed in the ship hull at the other end of the line.

SHIPWAYS

Open horizontal, steel framed, assembly platforms 75 feet by 300 feet immediately inboard from each of the eleven shipways and about 3 feet off the ground receive the partial assemblies from the plate shop. Inner bottoms of the cargo vessels consisting of steel floors and tank top are are welded in an upside down position by either Union Melt machines made by Linde Air Products Company or by Lincoln electric hand torches. Union Melt is a self-propelled, continuous, portable electric welding machine that when set up for a butt weld on plate work follows the seam and welds at the rate of 2 feet per minute. The electrode and fluxing agent are automatically fed from the machine to the point of weld. Pipe work and bracing are placed in the accessible, reversed 60-foot by 50-foot sections of inner bottoms. When completed and ready for turning over these sections weigh about 50 tons.



AUTOMATIC WELDING WITH A UNION MELT MACHINE

Parallel to and between each shipway are horizontal crane ways on the ground level. Two Colby and ten American whirly cranes on gantry mountings run from the inboard end of the assembly platforms to the outboard end of the building way. These cranes turn over and transport to the hull the inner bottom assemblies as well as completely fabricated bulkheads and deck sections. The rigs are much the same as

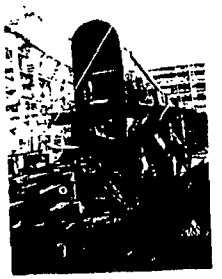
described for the plate storage yard using 150 horsepower electric motors in the hoists. Capacity is 55 tons on a 46-foot radius of the boom. The operator sits about 50 feet above the base of the 130 pound rails spaced 28' - 6" center to center and manipulates the many controls on circuits carrying 440 to 2,200 volts. Travel speed on the rails is 200 feet per minute. The outer end of the craneway is founded on wood piles with the 6-inch plank deck about 18 feet above the ground line. Dead weight of cranes is 168 tons.

INNER BOTTOMS WELDED IN UPSIDE DOWN POSITION
NOTICE LIGHTENING HOLES CUT IN FLOORS

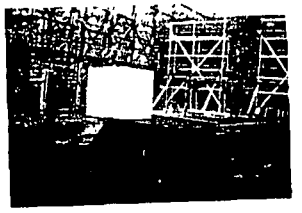
The inclined shipways are divided into 434-foot long building ways covered with a 3-inch and 6-inch plank deck and 334-foot long open outboard ways. Wood piles support the timber shipways. A typical outboard pile bent, spaced at 6-foot centers, consists of 2 groups of 3 piles each, centered 10 feet from the longitudinal centerline of the shipways. This 20-foot spread of the ways is roughly one-third of the beam of the ship. A 14" x 16" x 32' - 0" cap on the top of these piles supports falseways, cross ties and two standing ways each consisting of three 10" x 10" 54S. Cross ties are tied to the caps with braces. Underwater bracing of the pile bents at the way end to take drop-off stresses at time of launching was an important consideration in the shipway design. Prefabrication of the outboard ways, floating and sinking into place eliminate much underwater work. Special splicing of the longitudinal standing ways, shear blocks and bolted connections were designed for possible 300,000 pounds tension when launching a 3,360 ton hull, 400 feet long. Maximum load per pile at the fore poppet during launching is computed to be 30 tons.

The decked building ways support the keel blocks and struts under the hull as

well as ship scaffolding and the standing ways. Convenient outlets for compressed air, power and water are available along the building ways. The entire length of 734 feet of sliding surface in the standing ways is inclined downward toward the river at a variable slope between 9/16" and 5/8" per foot. The land end is about

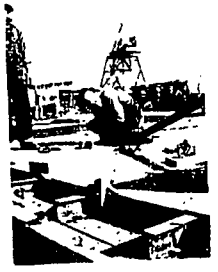


SHAFT TUNNEL SET ON BLOCKS
ON BUILDING WAYS



CONCRETE WEIGHT BLOCK SET ON TANK TOP
TO ELEMINATE DISTORTION AND FACILITATE
WELDING OF FLOORS

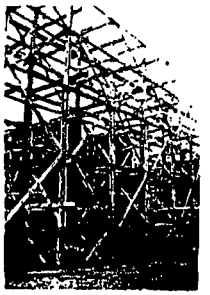
12 feet above the ground line and the space between the deck and the ground has been made into modern toilet, locker and shower bath space for the workmen and tool rooms. Considerable working time has been saved and sanitary conditions improved by making these comfort facilities available at each shipway.



HAND WELDING THE TANK TOP
ON THE SHIPWAYS

CHIPPING OUT TACK WELDS HOLDING
INVERTED FLOOR TO TANK TOP
AN AIR HAMMER IS USED

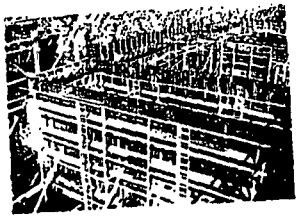
An innovation in ship staging over practices employed in shipyards during World War I is the prefabrication of wood scaffolding. Bents 54 feet high and 8 feet wide are completely framed and bolted together on a loading platform about 1/2 mile from the shipways. Trucks haul the bents out to the ways and fast, planned erection does not interfere with other building operations. The scaffolding, about 4 feet from the outside of the ship hull, extends entirely around it from stem to stern. Bents are erected on 12-foot centers and are tied together by 2"x6" ledgers and across diagonals. Two uprights of each bent are both made of two 3" x 8" separated so that adjustable spalls can be wedged in place at any desired elevation. Horizontal 4" x 6" wales, at 10-foot centers and 2" x 6" diagonals form a truss of each bent capable of taking a live load on each of the five spall supported working platforms of 740 pounds plus a horizontal wind load of 10 pounds per square foot on exposed surfaces. Adjustable handrails are provided for each working platform. Each bent is bolted through and tied to the decking on the ways. Connections consist of #2 split ring connectors, 3/4-inch bolts and malleable iron washers. Very few nails are used and most of them confined to the 8 stairs and 22 ladders furnished for each hull. Dismantling and erection on another way or at time of ship launching can be done without injury to the bents because of bolted connections. Conveniently spaced stairs conserves energy of the workmen and reduces accident hazard.



SCAFFOLDING AROUND HULLS PERMIT ACCESS AT ANY HEIGHT.

Work on the welded ships brought forth problems in expansion, contraction and fitting, that could only be solved by experience. During hot days in June and July steel hull plates would be a different size than they were at night. Sequence of welding sometimes produces unequal expansion and contraction making plates overlap or fail to meet and calling for corrective measures on fitting of butt welds. The use of automatic welding machines instead of hand welders is not an unmixed blessing. In the early morning hours before the Union Melt machine can be used on hull plates, it is necessary to dry dew out of the plate seams with a gas torch and then wire brush the oxide that formed.

Frequently, tack welded plates have to be chipped free to allow continuity of welding without distortion or high concentration of residual stresses. One of the stunts used to hold down the inner bottoms to the keel plates was to place a large concrete block weighing 11 tons on the tank top. The weight pressed the floor down onto the keel plate while it was electrically welded in place.



BULKHEADS OF THE SHIP SHOWN IN PLACE AND READY FOR CONNECTION TO SHELL STRAKES AND DECKS

FITTING BASIN

After the hulls are launched they are floated into a dredged out fitting basin for installation of final equipment. Engines, boilers and as much of the machinery as is available will be placed while hulls are still on the ways to keep from having to leave large holes in the decks for later installation. The fitting basin is 2,250 feet long, 200 feet wide and 20 feet deep below low water. To save steel for ships a bulkhead wall of 12" x 12" splined, creosoted wood piles 80 feet long were driven on the yard side of the basin. This wall was tied by steel rods at 8-foot centers to dead men 40 feet back in the fill.

A timber deck fitting dock supported on long wood piles, maximum 105 feet long, extends the entire length of the basin. This dock carries railroad tracks as well as gantry crane rails. Ship fittings arriving by rail are unloaded directly into the hull by the gantry mounted whirly cranes. Parallel to the dock and within reach of the 125-foot crane boom are located the warehouse of ship fittings, the pipe shop and the machine shop.

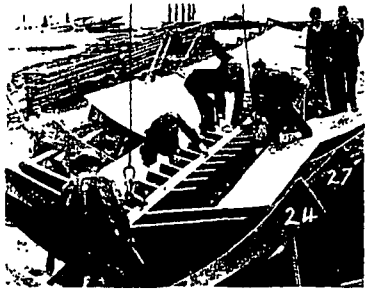
Now that you have been taken around the Oregon Shipbuilding Yards you are ready to learn a few things about the EC-2 boats that are constructed here.

A.S.C. OF SHIP CONSTRUCTION

LESSON 2

YARDS FOR NAVAL CRAFT

In lesson 1 the construction of an emergency shipyard was described. Brief mention was made of the buildings and ways. Here erection was visualized and planned, definitely and comprehensively, for the production of one type of ship on an assembly line basis. On the other hand, this lesson will be confined to a description of some of the other yards where offices, shops, railroad sidings, personnel, and equipment were on the site doing other work at the time new contracts were made for ship construction. Conversion from structural steel and heavy machine production to naval work as exemplified by Willamette Iron and Steel Co., Commercial Iron Works, and Albina Engine and Machine Works is an instructive story.

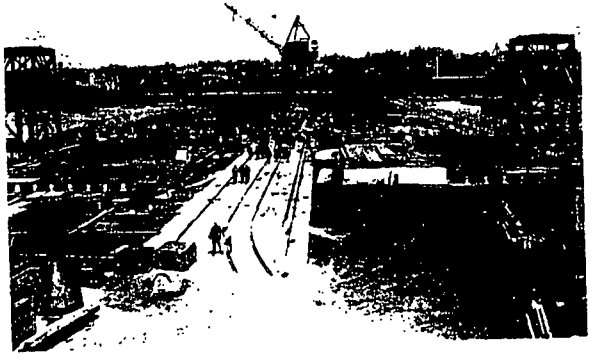


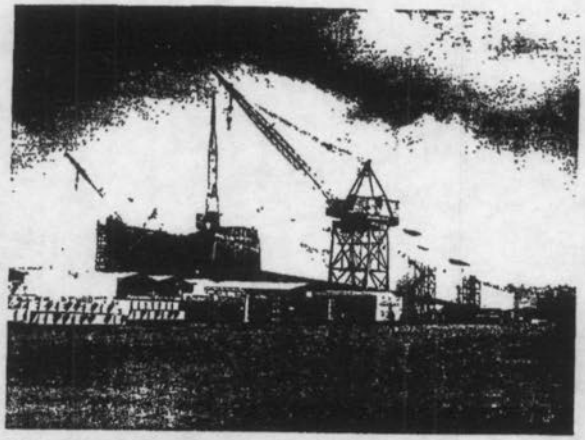
ONE OF TWO KEEL SECTIONS FOR 165 - FOOT PATROL CRAFT IS LOWERED INTO PLACE ON BLOCKS AS WORK GOT UNDERWAY ON THE NAVY DESTROYERS AT ALBINA ENGINE AND MACHINE WORKS.

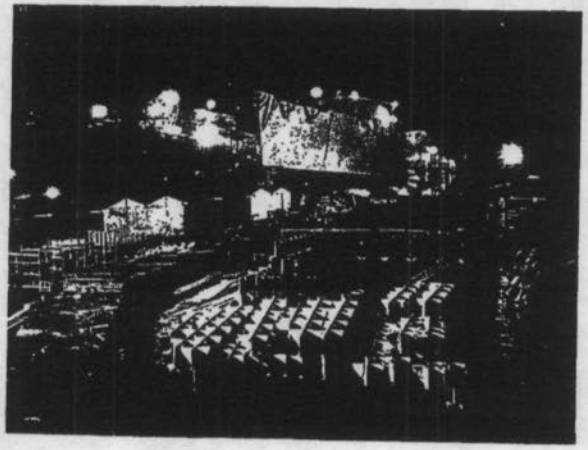
Why are certain steel fabricators able to get prime contracts from the Navy while other concerns can operate only as sub-contractors? The answer is, that the prime contractor must be on deep water for launching boats, must have sufficient acreage for plant expansion, must be served by railroads, highways, utilities, and must be close to a labor supply which will enable expansion of the working force over-night if necessary. Plate shops of Willamette, Commercial, and Albina fulfill these requirements.

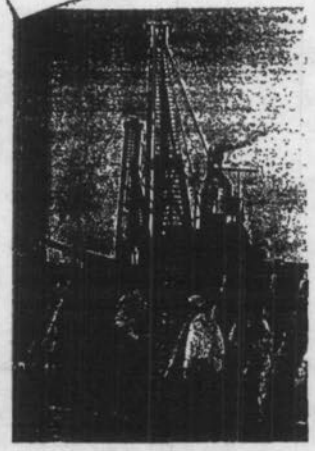
In the picture following Willamette Iron and Steel Co. is shown prior to 1939. At this time the company was engaged in fabricating structural steel for bridges, power houses, dams and for some marine work mostly on repair of river boats.

The three pictures following show added facilities and successive stages in construction of naval vessels, a result of new contracts subsequent to the above period.









ONE OF THE BIG PILE-DRIVERS AT THE 1,500,000 NEW SHIPYARD AT WILLAMETTE IRON AND STEEL CORPORATION IS SHOWN OUTLINED AGAINST THE SKY. IN FRONT OF IT ON THE TIMBERS OF ONE OF THE TWO 700 FOOT LONG SHIPWAYS WORKMEN ARE OPERATING PNEUMATIC DRILLS AND AUGERS.

Foundations for shipways are on wood piles driven into the ground both above and below the water line. Where the ship is long, say 200 feet or more, it is necessary to launch it stern first, sliding it longitudinally into deep water. Another method of launching is broadside which has the advantage of a checked vessel movement after the boat gets into the water. The disadvantage is that much of the available water front is taken up by one boat during the building period.

Piles for the launching ways are arranged to give support for the hull while it is being built and particularly at the time of launching. The sketch below shows a typical pile bent on the building ways along with the supporting keel blocks.

When launching the boat the piles at the end of the ways that are under water get unusual loads on them, first as the stern of the boat tips into the deep water off the ways and second as the boat pivots on the fore poppet when the stern end becomes buoyant. Launching stern first in this manner requires a wide width of river at the site or else the boat will run aground on the other bank. In broadside launching the length of the boat offers enough resistance to movement so that striking the opposite shore is not a consideration.

Depth of water at launching ways is important but on the Willamette River there is a 35 foot deep navigable channel and it is only necessary to get a depth of 20 feet at the end of the ways. River launching at all yards is complicated by fluctuations in the water surface during floods and additional expenditures for longer ways on this account are necessary. The length of the ways depend also on the length of the ship to be built extending inboard from high water line at

FIG. 4- SHIP POSITIONS AT TIME OF LAUNCHING

FIG 3- HULL ON BUILDING WAYS

VIEW FROM ROSS ISLAND BRIDGE OF THE COMMERCIAL IRON WORKS SHIPYARD PLANT, NOW BEING ENLARGED TO THREE TIMES ITS FORMER SIZE IN PREPARATION FOR THE CONSTRUCTION OF FOUR $500,000 WET TENDERS FOR THE UNITED STATES NAVY. THE NEW BUILDING IN THE FOREGROUND WILL HOUSE THE STEEL PLATE SHOP WHERE STEEL WILL BE CUT FOR VESSELS.

least the same length as the overall ship length. Outboard the ways have to be extended to permit the stern to float while the stern is still on the ways during low water. There can be no dropping off the way end for heavy boats. Figure 4 shows a profile of the ways and three important positions of the ship at the time of launching.

The width of the ways must be equal to the beam of the ship plus additional room on each side for scaffolding. Declevity for launching ways is about 11/16" or 3/4" per foot. Keel blocks are used to allow workmen to work underneath the vessel on the ship's bottom.

"BARN DOOR" PLACED ON THE STERN OF VESSEL TO KEEP IT FROM GOING OUT ACROSS THE WILLAMETTE RIVER AND HITTING THE OTHER SIDE. BOAT TO BE LAUNCHED STERN FIRST.

Yard Layout and Buildings

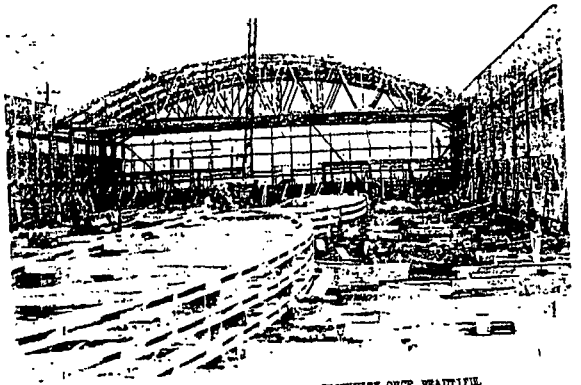
A good idea of layout and buildings can be obtained by studying photographs in this text book. In general, the important thing is to move and lift raw material as little as possible and to arrange a fabrication sequence that permits a straight line assembly. The time is not far distant when prefabricated parts of ships will move on conveyors past trained workmen who will do one simple job and do it well as in the automotive industry.

PLANT OF THE WILLAMETTE IRON AND STEEL CORPORATION, 2860 N. FRONT AVENUE, WHICH IS TO FULFILL GOVERNMENT SHIP CONSTRUCTION AND CONVERSION CONTRACTS THAT HAVE BEEN AWARDED IT. BUILT TO ITS PRESENT SIZE IN WORLD WAR DAYS, WHEN IT CONSTRUCTED 500 SCOTCH MARINE BOILERS AND OTHER EQUIPMENT FOR GOVERNMENT SHIPS, IT HAS BEEN REORGANIZED AND MODERNIZED TO HANDLE NEW WORK. IT HAS HANDLED THE $1,000,000 CONVERSION OF THE CITY OF BALTIMORE INTO A TROOP SHIP AT OCEANIC TERMINALS AND A SIMILAR JOB ON THE CITY OF NEWPORT NEWS.

Shipyards usually contain the following buildings and structures:

1. General Offices for accounting, management, drafting, etc.
2. Mold Loft for making and storing templates for ships. These are similar to patterns that a dressmaker might use.
3. Plate shop containing cutting tools, rolls, furnaces, bending slabs, and conveying machinery, located close to mold loft.
4. Plate storage yard where steel plate is racked up. This should be close to the plate shop.
5. Pipe shop for cutting, bending, and fitting pipe.
6. Joiner shop where ship wood work is done. Even on steel ships some wood is used.
7. Machine shop for erection, boring and machining ship parts.
8. Sheet metal shop where tin and coppersmiths ply their trades.
9. Electric shop for marine electricians.
10. Assembly bays for partial assembly of ships.
11. Warehouse and ship stores for the thousand and one items entering a completed boat.
12. Building ways where the boat hull is assembled.

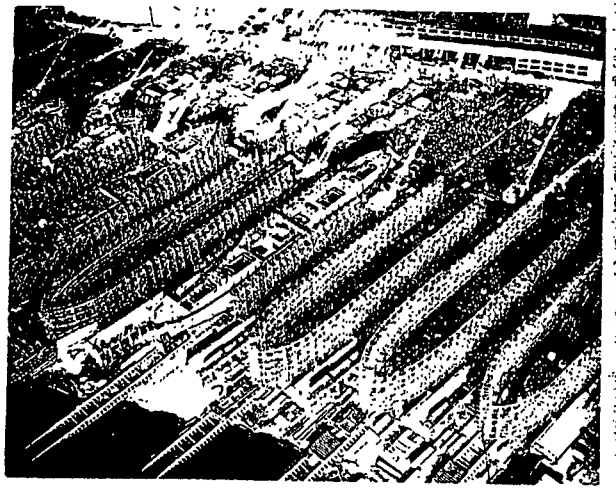
Tools used by the workmen in their various trades cannot be enumerated here but mention will be made of some of the large tools, conveyors, and equipment that the Company uses. These are as follows:



WITH TYPICAL AMERICAN SPEED AND INGENUITY ONCE BEAUTIFUL SWAN ISLAND AIRPORT IS BEING TURNED INTO A SHIP BUILDING YARD. THE 130 x 350 FOOT MOLD LOFT BUILDING IS SHOWN UNDER CONSTRUCTION.

1. Plate bending rolls for forming molded steel plates.
2. Oxy-acetylene torches for cutting steel plates in a straight or curved line.
3. Giant shears for straight cutting of plates.
4. Punch presses for punching rivet and other holes in steel.
5. Multiple drills for the same purpose as No. 4.
6. Planers for smoothing edges of steel shapes and plates.
7. Furnaces for heating channels, angles and eye beams before they are bent by hand to templates on the bending slab.
8. Welding either by hand or by automatic process by electric arc. Gas welding is seldom done now.
9. Jogging machine which offsets a plate edge to avoid the use of liners.
10. Countersinking by a shop mounted tool for rivets so that rivet heads will not protrude outside the surface of the metal.
11. Gantry cranes for lifting heavy pieces from railroad cars or trucks into storage space or into holds of vessels.
12. Overhead cranes in the plate shop for handling heavy plate from one machine to the other.

The above list is incomplete but will give some idea of the use to which some of the large power tools are put in a ship yard.



SHOWING PARALLEL SHIP WAYS, BUILDINGS, CRANES AND SHIPS ABOUT TO BE LAUNCHED AT OREGON SHIP-BUILDING YARDS.

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COURTESY OF PHOTO ART COMMERCIAL STUDIOS.

A.B.C. OF SHIP CONSTRUCTION

LESSON 8

ORGANIZATION, DUTIES AND PAY SCALE

Personnel in a shipyard can be broadly grouped into two classes: those that work on the ship hull and those who handle the mechanical equipment. This grouping not only comprises helpers, journeymen, leadmen and foremen of the several trades but extends upward to supervisors, superintendents, draftsmen and engineers. Draftsmen and engineers working on the mechanical equipment for a boat are a distinct class from the naval architects and engineers who design the ship hull.

In a well equipped and staffed shipyard the following trades will be represented:

1. Designers and draftsmen
2. Burners
3. Welders
4. Anglesmiths
5. Slabmen
6. Flange turners
7. Blacksmiths
8. Firemen
9. Press operators
10. Hammer operators
11. Crane operators
12. Boilermakers
13. Bolter-ups
14. Chippers and caulkers
15. Compressor operators
16. Dockmen
17. Drillers and reamers
18. Electricians
19. Rivet heaters
20. Loftsmen
21. Molders
22. Machinists
23. Operating Engineers
24. Painters
25. Pipefitters
26. Punch and shearers
27. Rollermen
28. Riggers
29. Riveters
30. Sheet metal workers
31. Shipfitters
32. Ship wrights
33. Joiners
34. Tank scalers
35. Warehousemen

There are probably other trades employed that have not been listed but the majority appear in the table above. These journeymen or mechanics frequently have helpers to aid them and of course there are watchmen, janitors, laborers, chauffeurs and auxiliary or yard maintenance personnel employed. Upon proven ability the mechanic may advance to the status of leading man which carries an increase in pay with increased responsibility. The leading man may become a foreman and this too entails larger responsibilities and more pay.

Designers and draftsmen are employed either in the main office or in the mold loft. Their job is to prepare detail plans for parts of the ship so that it can

be built with the equipment in the yard. Frequently plans come from the naval architect or Maritime Commission which allow several ways of doing a piece of work. The designers then get busy and prepare plans so that the work can be done in an

A LARGE GROUP OF SHIP DRAFTSMEN AND ENGINEERS AT WORK. THEY MAKE THE DRAWINGS FROM WHICH BLUEPRINTS ARE MADE THAT THE SHIPYARD WORKER MUST LEARN HOW TO READ.

acceptable manner with the shop equipment. The responsibility involved is large because a poorly designed boat may not only be useless but is actually dangerous.

Burners and Welders. Burners using acetylene torches for cutting metal in irregular shapes are unimportant craft in a shipyard. Welding, using an electric arc, is one of the newer processes that distinguishes shipbuilding in this war from previous wars.

BURNING

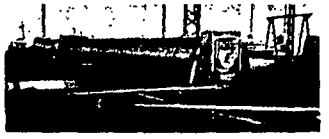
BENDING A HOT FRAME ON SLAB

The size of the welders doesn't mean a thing. The little fellow puts out just as much work as his high-pockets buddy.

The slabmen. Slabmen, anglesmiths, flange turners are designations given to men who bend steel sections to curved surfaces while the metal is hot. These blacksmiths, as they were once called, are usually employed in the plate shop.

Boilermakers: Boilermakers handle a variety of work and machines such as rollers, plate straighteners, shears and grinding.

Chippers and Caulkers.



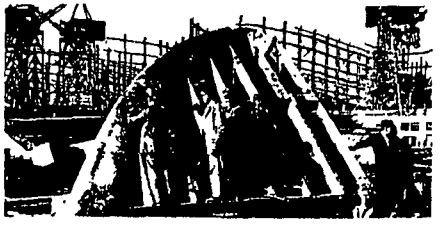
TWO OF THE BOYS ROLLING THEIR OWN

Chippers and caulkers are responsible for the water or oil tightness of compartments and tanks. Caulking is a means of mechanically closing the joint between connecting steel members so that it will not leak and the tool used is either a hand or pneumatic caulker. Chipping, of course, employs chisels to trim edges, cut holes or free welds and can be done by hand or by an air hammer. Because of the large amount of welding that is done the chipper has considerable work to do in finishing of welds.

Loftsmen. These are the men who convert the blueprints of ship plates and steel sections into full size patterns or templates. They work on a floor which is like an overgrown drafting board and apply their skill to the geometry of ships. Template making for riveted ships is complicated because it is necessary to have rivet holes in plates line up exactly. For welded ships the loftsman must know about shrinkage of metal caused by cooling after applying welding torches.

A SECTION OF THE MOLD LOFT

Shipfitters. A shipfitter is a metal worker whose duty is to layout and fit the various parts of a hull together. He not only must know welding, riveting, pipefitting, erection and some machine work but must also be able to read blueprints, do certain computations involving both arithmetic and geometry and be an expert on ship nomenclature and erection sequence. The current trend in ship construction is to make larger sub assemblies and the shipfitter must know how to put these sub assemblies together properly.



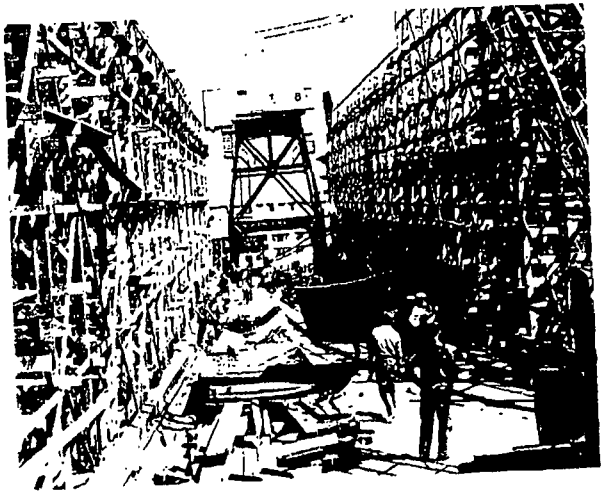
SHIPBUILDING SHORT-CUT. SUB-ASSEMBLY OPERATIONS, SUCH AS SHOWN HERE, ACCOUNT FOR SHARP REDUCTIONS IN CONSTRUCTION TIME AND ADVANCEMENT OF LAUNCHING DATES. WHOLE SECTIONS OF THE HULL ARE FITTED TOGETHER ON THE GROUND AND LIFTED INTO PLACE ON THE SHIPWAYS.

Riggers. These men work with the large yard cranes making certain that loads are securely hitched to slings and cables and in general supervising weight lifting into hulls and around the yards. The yard rigger differs from the ship rigger who installs all the standing rigging, antennae, blocks, tackle, hoisting lines and similar items.

Part of the riggers work is to secure plates to cable slings and to signal crane operator when placing the load in the correct spot.

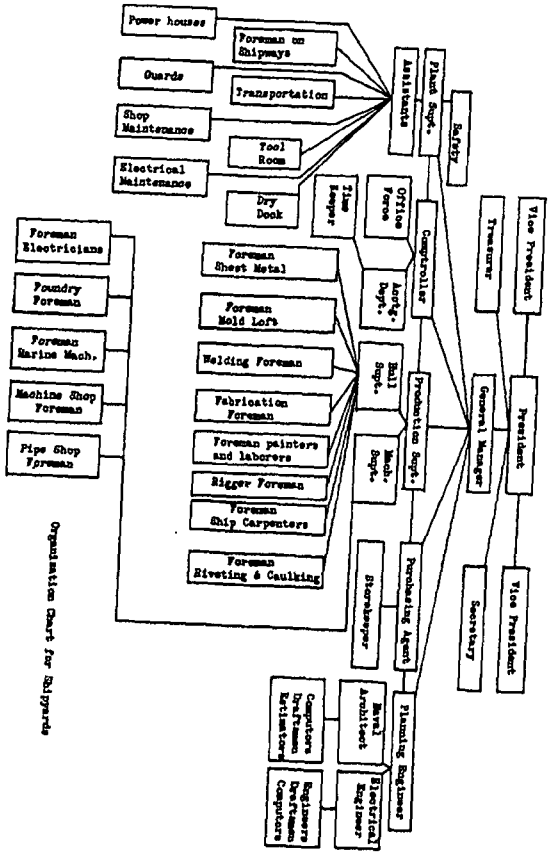
Supplemental sheets are available that describe each of the 55 jobs mentioned in the first part of this lesson.

The management of a shipyard is the biggest factor in expediting production. Proper planning and an office organization to carry out those plans in sequence is essential. Tools, materials and workers must be brought together to produce a



RIGGERS AT WORK

ship and this must be done without delaying any of the three items since wasted time cannot be recaptured. After the management gets all necessary work underway according to plan it must constantly improve working conditions, set up a step by step advancement program for skilled workers with leadership ability. Supplies must be constantly checked and reordered and in this day of priorities special forms must be submitted showing that material is to be used to further the war effort. A sample organization chart is given showing how responsibility is divided in shipyard management.



Wage scale, hours of work and kindred questions are covered in a Master Agreement between labor and management for use on the West Coast. The important parts of this contract are reproduced below. Inserted comments are in quotations and are instructional only and not a part of the Agreement.

WITNESSETH:

1. Scope of Agreement

This agreement shall apply to all work and activities of the Employer in connection with the construction of new vessels on the Pacific Coast in connection with the National Defense Program, including new vessels to be constructed for the U.S. Navy, U.S. Maritime Commission, and for foreign governments with the approval of the United States Government.

A "new vessel" shall be construed to be any newly-constructed floating structure prior to its completion, final acceptance and employment in the service for which it has been constructed. "Construction of new vessels" (as differentiated from repair) shall include substantial rebuilding of a vessel prior to service in order to adapt it to a use different from that for which it was previously planned, and shall not be deemed as repair work until such vessel has made a passenger or cargo-laden voyage.

2. Hiring of Men

Employer agrees to hire all workmen it may require hereunder, in the classifications contained in Schedule "A" hereto attached, through and from the Unions and to continue in its employ in said classifications only work-men who are members in good standing of the respective Unions signatory hereto and affiliated with and in good standing in the American Federation of Labor. All workmen employed hereunder shall be required to present a clearance card from the appropriate Union before being employed.

The Unions agree, on requisition of the Employer, to furnish competent workmen in the classifications contained in Schedule "A" for the prosecution of the work covered by this agreement. The employer may refuse to employ and may discharge any employee for any just and sufficient cause.

Unions agree that the workmen to be furnished to the Employer under this agreement shall be willing to, and shall, submit to the making of such records for the purposes of identification as are, or may be, required by the United States Government in connection with the National Defense Program.

Only citizens of the United States need be employed and the Employer shall have the right to require satisfactory evidence of such citizenship.

If, after Employer has placed requisitions for workmen with the Union signatory hereto, the Unions shall fail to supply competent workmen within forty-eight (48) hours thereafter, Employer shall be free to hire the necessary workmen when and where it chooses without regard to Union membership; provided, however, that such workmen, so employed, shall be required to secure a clearance card from the appropriate Union before starting work.

In the event such workmen fail to make application to the appropriate Union within the period of time prescribed by such Union, they shall be replaced by members of appropriate Union when they become available.

3. Foremen and Leading Men

Foremen and leading men in all departments shall be selected as far as

Where the services of an employee are terminated after he has worked 1200 working hours without a vacation during the vacation period above established, such employee shall receive 40 hours' pay in lieu of vacation. Should such employee be re-employed thereafter, he shall not be entitled to vacation credit during the balance of the vacation period, it being intended that only one week's vacation in the 12 months' period shall be granted any one employee.

4. (Referring to Paragraph 8 of Master Agreement.) The phrase "nor shall there be a limit on, or curtailment,of, production," shall not be so construed as to permit any contract, bonus, piece, or task work.

5. (Referring to Paragraph 11 of Master Agreement.) All equipment and processes that emit or create harmful dusts, fumes, vapors or gases in quantities, that create a harmful exposure to employees exposed thereto and where the prevention, elimination, or control of said hazards by means of general ventilation alone are inadequate to furnish the required protection, shall be connected to an exhaust system for the removal of said hazards as far as practicable at their point of origin.

6. (Referring to Paragraph 19 of Master Agreement.) The decision of the Arbitration Committee shall be rendered within 30 days after the request is made to the District Judge for the nomination of the arbiters.

No attorneys' fees shall be included in the cost of arbitration. No fees shall be paid to the arbiters named by the Employers or by the Metal Trades Council. The maximum fee to be allowed to the third arbiter shall not exceed $50.00 per day.

MEMORANDUM AGREEMENT

1. The program of continuous operation, 24 hours per day, 7 days per week, to the end that the maximum possible production of ships will result.
2. All workmen covered by the Master Agreement shall be classified into 7 classes, lettered "A" to "G", as shown in the illustration on other side of card. Each class shall have 6 regularly established shifts in each week, and a regularly established day off in each week, as shown in the attached illustration.
3. Any workman required to work on his regularly established day off shall be paid at double time rates.
4. The 6th shift worked in any one week shall be paid at time and one-half the straight time rates.
5. The shifts in any week on which any workman voluntarily does not report for work shall not be computed as days worked under Paragraph 4.
6. The day on which a holiday falls, whether worked or not, shall be considered as a day worked under paragraph 4.

	FIRST WEEK							SECOND WEEK							THIRD WEEK							FOURTH WEEK						
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
A	X								X								X									X		
B		X								X								X									X	
C			X								X								X									X
D				X								X								X								X
E					X								X								X	X						
F						X								X	X								X					
G							X	X								X								X				

	FIFTH WEEK							SIXTH WEEK							SEVENTH WEEK							EIGHTH WEEK						
	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
A					X								X								X	X						
B						X								X	X								X					
C							X	X								X								X				
D	X								X								X								X			
E		X								X								X								X		
F			X								X								X									X
G				X								X								X								X

X--Designates regularly established day off.

LESSON 4

DESCRIPTION OF SHIPS

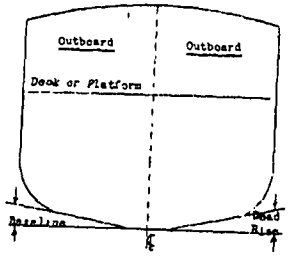
SHIP BODY PLANS

Steel ship production is distinguished from commercial steel fabrication such as buildings, bridges, gates for dams, etc. by molded surfaces. Instead of using flat plates and straight lines as in bridges the ship utilizes rounded plates and curved lines known as molded lines. The outside shell of a ship can be said to consist of a number of points in space located from three planes of reference and connected with smooth, "faired" lines that give a molded surface free from humps, hollows and abrupt projections or indentations.

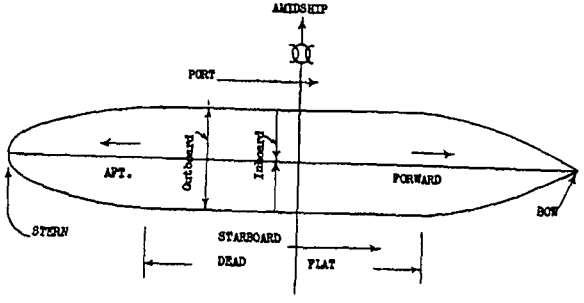
MINELAYER AT WILLAMETTE IRON AND STEEL
NOTE CURVED OUTLINE OF HULL TO WHICH
MOLDED PLATES WILL BE ATTACHED.

A boat can be likened to a hollow steel box made up to an outside skin plate and braced inside by a series of closely spaced frames. These frames are complete, closed loops with the floors as bottom members, channels or angles as the two vertical sides and the top angle member fastened to the top deck. At hatch-ways where the frames are not closed they must be connected to girders that take the load from several frames and transmit it to vertical stanchions.

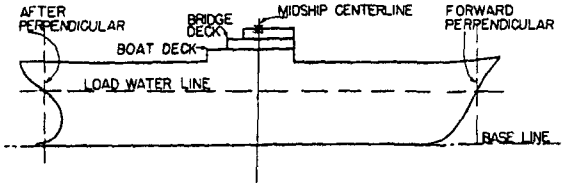
In the cross section of the boat sketched alongside it will be noted that the



bottom slopes upward from a flat keel. This distance above the base line is known as "dead" rise. The rounded portion between the bottom and the vertical sides is called "bilge". The top deck is usually curved upwards to shed water and this is called "camber". On the plan view of the boat the front end is always shown at the right of a drawing and is known at the "bow". The rear end is called the "stern". Right and left sides of the boat when facing forward toward the bow are known as "starboard" and "Port", respectively. Port can easily be remembered as left because the words both have 4 letters. When running, the ship carries green lights on starboard and red, or port colored, lights on the port. The amidship line is half-way between bow and stern and is marked ℄℄. Parts of the boat are either outboard from the longitudinal centerline, marked ℄, or inboard from the shell. Where the sides of the boat are flat fore and aft of the amidship section that portion is known as "dead flat".

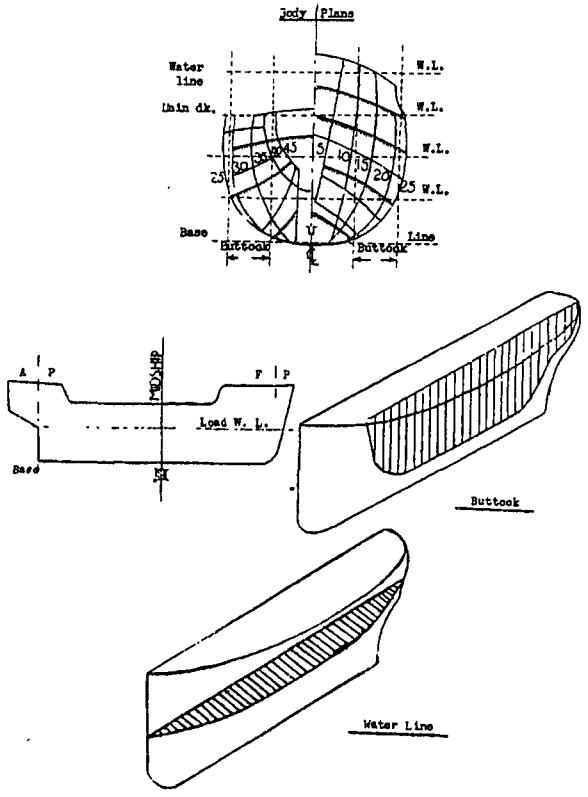


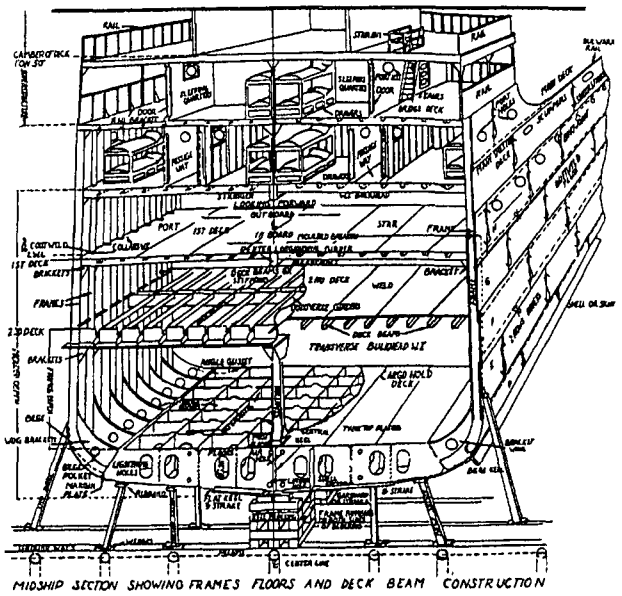
The first plane of reference referred to above is horizontal thru the keel of the vessel and allows vertical measurements upward to decks and other parts of the ship. Suppose that a banana was laid on a flat table. To measure upward to the rounded surface of the banana we would place a rule on end on the table and sight by eye to the graduation of an inch and three quarters, say, that marked the height of the banana above the table. In the same manner a ships deck or any other part of the ship can be measured vertically above the base plane or "base line" as it is called. The abbreviation of base line is B.S. These vertical dimensions are known as "heights" and are given in feet, inches, and eighths of inches above the base line. Thus when a table of heights is given on a ship blueprint such as 37-5-7 it means that at a designated perpendicular to the base line it is 37'-5 7/8" to the upper or weather deck. By locating a number of points that way on a number of perpendiculars it is possible to get the outline of the top desk of the vessel. These points probably locate the bow and stern portion of the upper deck at a higher elevation than the central or amidship part. This upward deck curvature is known as "sheer" concave.



The second plane of reference from which points on the shell are located is perpendicular to the first plane, runs longitudinally from bow to stern through the ship and intersects the first plane in what is known as the "base line". This longitudinal plane divides the ship into two symmetrical halves in the same manner as you can split a banana from end to end. From this centerline plane, merely called "centerline" and designated ℄, are measured perpendicular ordinates known as "half breadths". A table of half breadths at the L.W.L. (load water-line)

and at a designated perpendicular might read 27-4-0 which means that the inside of the steel plating of the shell at that point is 27'-4" outboard from the centerline. Body lines or points are always given in tabular form as feet, inches, and eighths of an inch.





MIDSHIP SECTION SHOWING FRAMES FLOORS AND DECK BEAM CONSTRUCTION

The third plane of reference is perpendicular to the other two planes and cuts the ship cross-wise midway between the bow and the stern. Using our banana as an illustration we cut it with a knife cross-wise through the middle half-way between the top and the bottom. This plane is known as the midship section, designated ⌀ , and points can be located from it toward the bow (or forward) or toward the stern (aft). Actually in shipbuilding the body lines are given to a series of parallel planes to this midship plane and begin close to the bow at what is known as the "forward Perpendicular". Another parallel perpendicular runs through the stern and is known as the "after perpendicular". The distance between the fore and aft perpendiculars gives a rough idea of the cargo space length of the vessel. For E-C-2 ships this is 416 feet and can be divided into 20 equal spaces

along the baseline from which intermediate perpendiculars are located. These perpendiculars are numbered consecutively from F.P. (forward perp.) as 0 to A.P. (aft. perp) as 20 in some cases and permit final location of a point on the molded surface of a ship from three planes of reference. It should be noted that the molded surface is the inside of the steel plates forming the shell.

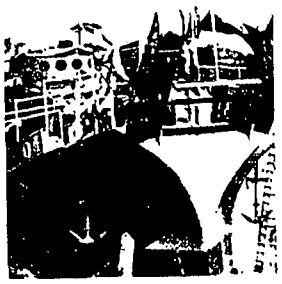
As a class exercise draw a ship base line and fore and aft perps with the F.P. at the right of the ship. Draw a top or plan view of the ship and show the ship centerline. Divide the distance between F.P. and A.P. into 10 equal parts (approximately) and number the graduations from 1 to 9 starting next to the F.P. Now on perpendicular 5 show the location of a point having a height of 2" full scale and a half breadth of 7/8". Do not dimension the point but make a tabulation showing what perpendicular the point is on and list the height as 42'-11 7/8" in the same way a naval architect would do it. Similarly list the half breadth as 21 feet.

In order to keep plates, sub assemblies and assemblies properly identified as they move through a yard being fabricated a code has been devised that identifies each piece of steel. These code numbers are painted on the steel parts and tell the worker just where that piece of steel is going. This erection sequence varies for the different yards since they are building different type boats and the learner will be given the opportunity to learn the code after he is employed in a specific yard. Mention of this erection sequence is herein made to indicate the extent of production coordination in the yards.

SHIP CLASSIFICATION

Shipbuilding in Portland may be roughly grouped into naval vessels and cargo vessels. As the name implies, naval vessels are built to carry on active, aggressive warfare and are designed and outfitted for this primary objective. New developments are military secrets and cannot be discussed here but certain general terms and definitions can be given because they are common knowledge and will aid the learner in his new job of building these vessels better and faster.

The biggest ship of the navy is the battle ship sometimes called "ship of the line" or "capital ship". Since these boats are not being built in Portland only the barest description will be given. The hull has changed form over a period of years until at present the design approaches in a sense the lines of a



U.S.S. CINCINNA SLIDES DOWN THE WAYS AT COMMERCIAL IRON WORKS SHIPYARD.

speed boat with long lengths and speeds up to 30 knots per hour. A knot is a nautical mile that is 6,080 feet long compared to a land mile which is only 5,280 feet long. To convert 30 knots per hour into an equivalent expression in land miles, increase by 15% or 4.5 miles per hour making 34.5 land miles per hour for speed. The length of a battle ship varies from 700 to 1000 feet and the beam may be 110 feet. Drafts are usually in excess of 30 feet and the tonnage (long tons) may be as high as 35,000 tons. A long ton in naval parlance is not the landman's 2000 lb. unit but is about 10 per cent larger or 2240 lb. The ship is heavily armored and may have 4 or more decks extending the full length of the ship, starting with the top or main deck and numbered 2, 3, and 4 as one goes below. Boats of this type are highly specialized pieces of machinery costing many millions of dollars each and taking about two or more years to construct.

DESTROYER U.S.S. CLEAVES

The destroyer is usually a lightly armed and unarmored vessel about 300 feet long having a speed of 35 knots per hour and a displacement of 1000 tons. The lines are "fine" i.e. the ratio of length to breadth is about 10 and the block coefficient is close to 0.50. By block coefficient is meant the ratio of the volume of the ship hull underwater compared to the volume of a rectangular prism having the same depth as the ship draft, the same length as the ship length at the water line, and the same width as the ship beam at load water line. The higher the block coefficient the clumsier the vessel. Also, the higher the ratio of length to breadth the faster the vessel if the propulsion machinery is the same. The

table below will give some idea of the variation of block coefficient and ratio for several types of vessel.

Type	Length & breadth	Block coef.
Battle Ship	8.0	0.48
Cruiser	9.0	0.46
Destroyer	10.0	0.45
Torpedo Boat	5.0	0.43

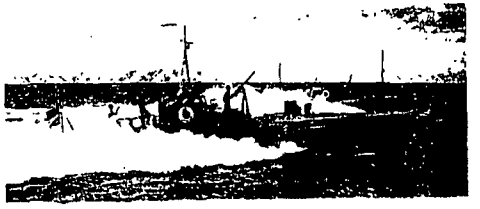
The name destroyer comes from the fact that they were formerly used to destroy torpedo boats. Because of the greater speed of modern torpedo boats the destroyer is now used to hunt down and destroy submarines. The armament consists of 3 or 5 inch guns, depth charges and torpedo launching devices. The bow is usually much higher than the stern or amidship section to enable the boat to breast high seas when traveling through the water at great speed. Over half of the hull space is given over to engine room equipment such as turbines, boilers and engine auxiliary equipment. A feature of the ship construction is the large number of transverse bulkheads that not only stiffen the vessel against strains incurred by sharp turns at high speeds in rough seas but also allow the vessel to remain afloat even if one compartment is damaged in action and flooded.

AMERICAN CRUISER AT SEA

Cruisers are faster than battleships, carry smaller guns and have a displacement of 7,000 tons for the light type and 10,000 tons for the heavy type. They act as auxiliaries to the fleet and are used for scout duty, convoy service and destruction of enemy merchantmen. There are no cruisers being built in Portland at present.

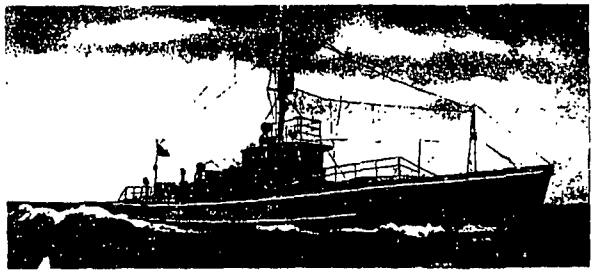
Motor torpedo boats are being built in this locality and are distinguished by a length of approximately 75 feet, multiple internal combustion engines of

1000 horsepower each and have attained speeds as high as 44 knots per hour. They have been effective against Japanese shipping and naval vessels darting in close and firing power rotated machine guns, torpedoes or depth charges and making a get-away before slower destroyers can sink them. Their usefulness has increased with improvements in hull design, propulsion machinery and propellers.



TORPEDO BOATS IN MANEUVERS

Mine layers, sweepers, patrol boats and submarine chasers are auxiliary naval craft that have been or are being made in Portland. The picture below shows a 110 ft. patrol boat powered by an 8 cylinder, 600 horsepower, 1500 R.P.M. engine.



PATROL BOAT

Cargo vessels built or to be built in the Portland area consist of the E-C-2 freighter and the heavier, longer tanker. Tankers are designated that way because they haul liquids such as oil, gasoline, molasses, etc. in the holds. They may be made of either riveted or welded construction and all seams must be made oil tight. Their speed has been gradually increased in late years until they now

make as high as 20 knots per hour and have a carrying capacity of 6 million gallons of oil.

SIMILAR TANKERS TO THE ONE ABOVE ARE TO BE BUILT AT SWAN ISLAND YARD.

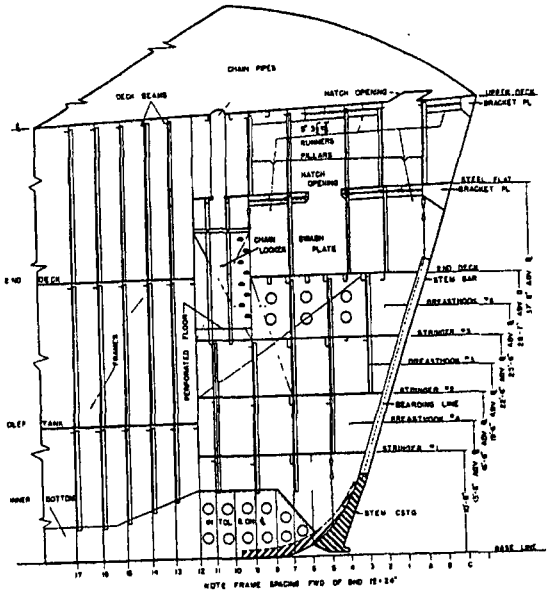
Emergency cargo boats known as E-C-2 represent the type boat that will be produced in greatest number in Portland. The E-C-2 ship is simple in design, having accomodations for only 38 crew members. Because of the small quarters, small deck-houses and the absence of the facilities usually found on larger ships, the ship can be built in less time, conserving man-hour time in its construction. Because of the type of ship it is, the bulkheads are less rigid than in ships carrying oil, ore, or similar heavy cargos.

Because of the small quarters, there is a greater space available for carrying cargo than would otherwise be possible. This in turn provides for larger movements of mechanized units, drygoods, and the like.

Inasmuch as the ship is designed for a definite purpose, is constructed in the least possible time, of the least amount of essential metals, it can be said that the E-C-2 has a very definite place in the war of the nations. It will join convoys with other E-C-2's built else-where, and under the protective arm of the United States Navy will carry those things to our forces which will aid materially in winning the war.

A general arrangement and outboard profile is shown in this lesson.

See pages 66 and 67



SECTION AT ℄ LOOKING TO PORT

DR BY E M OCALLAGHAN

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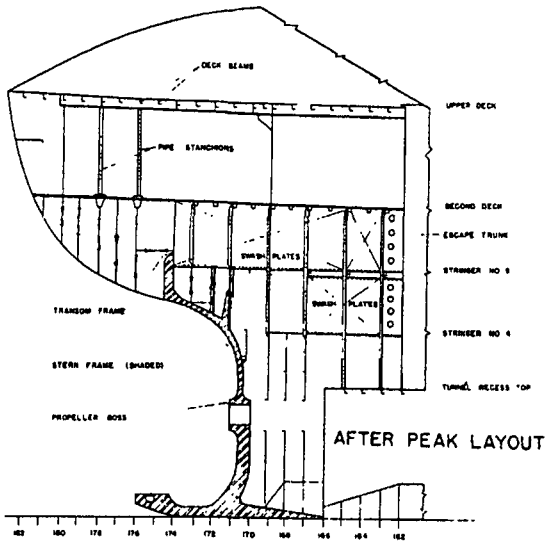

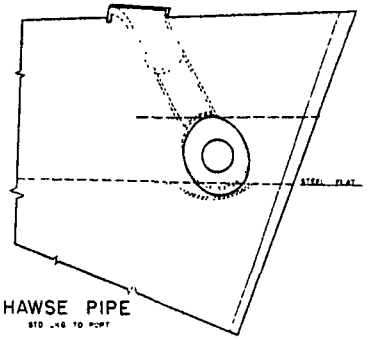

SHIPBUILDING TERMS

OREGON SHIPBUILDING CORPORATION

AFT--At, near, or toward the stern.

AFTER--Nearer the stern.

AFTER PERPENDICULAR--A vertical straight line at the after edge of the rudder post, intersected by the L.W.L.

AIR PORT--A circular opening in the ship's side.

ATHWARTSHIPS--Across the ship at right angles to the keel.

AUXILIARIES--Various winches, pumps, motors, and other small engines required on a ship.

BEAM--An athwartship member supporting a portion of the deck. Also the width of the ship.

BENDING ROLLS--Machine used to give curvature to plates.

BENDING SLAB--Heavy cast iron blocks arranged to form a large solid floor on which frames are bent.

BEVEL--The angle between the flanges of the frame or other member. (When greater than a right angle, open, bevel, when less closed.)

BILGE--The rounded portion of the hull between the side and the bottom.

BILGE KEEL--A fore and aft member fitted to the outside of the shell plating running along the bilge. It is used to prevent excessive rolling of the ship.

BILGES--The lowest portion of the ship inside the hull.

BITTS--Heavy steel castings fitted to the weather deck for securing mooring lines or hawsers.

BOOM--A long heavy spar pivoted at one end usually used for hoisting cargo.

BOSOM PIECE--Butt strap for angle bars.

BOSS--The curved swelling portion of the ship's hull around the propeller shaft.

BOW--The forward end of the ship.

BRACKET--A small plated used to connect two or more parts, such as deck beam to frame, frame to margin plate, etc.

BREAST HOOK--A plate structure fitted inside the hull near the bow to give local strength to the shell plating.

BRIDGE--The athwartship platform above the weather deck from which the ship is steered, navigated, etc.

BUILDING SLIP--A place where ship is built before launching.

BULKHEAD--A vertical partition corresponding to the wall of a building, extending either athwartship or fore and aft.

BULWARK--The ship's side above the weather deck.

BUTT—The joint formed when two parts are placed end to end.

BUTTOCK—Imaginary vertical lines running parallel to the center line of the ship extending from the bottom shell plates to the top most part of ship and are very essential in laying out lines on the ship.

BUTT STRAP—A small plate or other member used to connect the two parts of a butt by overlapping each.

CALK—To make a joint watertight.

CAMBER—The athwartships curve of a deck. (Sometimes called round up).

CANT FRAME—A frame not square to the keel line.

CARGO BOOM—Heavy boom used to load cargo.

CARGO HATCH—Large opening in deck to permit loading of cargo.

CENTER LINE—The middle line of a ship from stem to stern.

CHAIN LOCKER—Compartment in forward or lower portion of ship where anchor chain is kept.

CHOCK—A heavy fitting through which ropes or hawsers may be led. Also called mooring rings.

CLEAT—A fitting attached to the deck having two fore and aft arms or projections around which a rope or line may be secured.

CLIP—A short angle bar.

COAMING—The vertical boundary of a hatch or skylight.

COFFERDAM—The space between two bulkheads located very close together.

COMPARTMENT—A subdivision of space or room in a ship.

COUNTERSINK—The taper of a rivet hole for a flush rivet.

DAVIT—Heavy vertical pillar to lift boat.

DECK—The part of a ship that corresponds to the floor of a building. Can also be called a watertight flat, a steering gear flat, poop deck, bridge deck, fore deck, aft deck, main deck, etc. etc.

DECK BEAM—Athwartship support of deck.

DECK STRINGER—The strip of plating that runs along the outer edge of a deck.

DIAGONAL—Lines used primarily for checking and laying out frame lines and most generally run at an angle from the center line of the ship.

DOG—A small bent metal fitting used to close hatch covers, manhole covers, etc.

DOUBLE BOTTOM—Compartments at bottom of ship between inner and outer bottoms used for ballast tanks, water, fuel, oil, etc.

DOUBLER PLATE—A plate fitted outside or inside another to give extra strength or stiffness.

DRAFT—The vertical distance of the lowest part of a ship that is below the water when ship is afloat.

FAIR—Smooth, without abruptness or unevenness in agreement. Fairing the lines

consists of making them smooth. Rivet holes are fair when they agree with one another in adjoining pieces.

FAYING SURFACE—The surface between two adjoining parts.

FIDLEY HATCH—Hatch around smokestack and uptake.

FLANGE—Portion of a plate or shape at or nearly at right angles to main portion.

LAY FLAT—A small partial deck built level without curvature.

FLOOR—The lower portion of a transverse frame, usually a vertical plate extending from center line to bilge, and from inner to outer bottom.

FORE AND AFT—In line with the length of the ship longitudinally.

FORECASTLE—The forward upper portion of the hull usually used for the crew's quarters.

FORE PEAK—Part of the ship which is forward of the main framing and collision bulkhead.

FORWARD—Near or toward the bow.

FORWARD PERPENDICULAR—Is the line squared to the load water line at its intersection at the fore edge of the stem.

FRAMING—The support or stiffening of the shell plating, deck-plating, etc. (Usually consists of transverse frames (or "ribs") beams, floors, etc., and the longitudinal framing or keels, keelsons, longitudinal stringers, etc.) Web frames are extra heavy frames that are built up from steel plates bound by angles or face plates.

FRAME SPACING—The fore and aft distance between adjacent frames.

FREE PORT—An opening in the ship's side to allow water to run overboard.

GIRTH—This term is used in the mould, usually in referring to the width of the plates.

GUDGEON—Fitting on which rudder swings. The gudgeons fit around pintles and form a part of the rudder post.

HALF BREADTH—Width of a ship from the center line to the outboard edge or half-width of the beam.

HATCH—An opening in the deck.

HATCH BEAMS—Beams in hold similar to deck beams, but having no plating or planking on them. Sometimes called hold beams.

HAWSE PIPE—A large fitting attached to the bow of the ship through which the anchor chain passes.

HOLD—A large compartment in the lower part of the ship for cargo.

HULL—The body of a ship, including shell plating, framing, decks, bulkheads, etc.

INBOARD—Inside the ship toward the center line.

INNER BOTTOM—Plating forming the upper boundary of the double bottom. (Also called tank top)

INTERCOSTAL—Made in separate parts between frames, beams, etc.

ISHERWOOD SYSTEM--A system of building ships in which the frame-work is longitudinal or fore and aft instead of transverse as in ordinary ships.

JOGGLING--Offsetting the edges of plates of outer strakes to avoid the use of liners.

KEEL--The fore and aft member. Usually in the form of flat plates end to end, extending from stem to stern along the bottom of the ship on center line.

KEELSON--An auxiliary keel or stringer extending along and over or parallel to to the keel. (The center vertical keel.)

KING POST--Is the perpendicular part of the loading boom arrangement.

LAP--A joint in which one part overlaps the other, thus avoiding the use of a butt strap.

LAYING OUT--Marking plates, shapes, etc. for shearing, punching, etc.

LENGTH BETWEEN PERPENDICULARS--The length of the ship measured from the fwd. to the after perpendicular.

LENGTH OVER ALL--The length of a ship measured from the stem to the after-most point of the stern.

LIGHTENING HOLE--A large hole cut in the floor plate longitudinal etc., to reduce its weight.

LIMBER HOLE--A hole a few inches in diameter cut in a floor plate to allow the water to drain through it near the bottom.

LINES--The plans of a ship that show its form. From the lines drawn full size on the mould loft, are made templates of the various parts of the hull.

LONGITUDINAL--A fore and aft vertical member running parallel, or nearly parallel, to the center vertical keel through the double bottom.

MARGIN PLATES-The outer boundary of the inner bottom connecting it to the shell plating at the bilge.

MANHOLE--A round oval hole cut in the bulkhead, tank top, etc., large enough for a man to pass through.

MIDSHIP--At the middle of the ship's length.

MIDSHIP SECTION--A plan showing a cross section of the ship amidships. This plan shows sizes of frames, beams, brackets, etc., and thicknesses of plating.

MOULD LOFT--A building with a large smooth floor on which the lines of the ship can be drawn full scale.

OIL TIGHT--Riveted and caulked to prevent oil leakage. (This must be tighter than for water).

OUTBOARD--Away from the center line toward the side of the ship.

OVERHANG--Portion of the hull over, and unsupported by the water.

PILLAR--Vertical member or column giving support to a deck.

PINTLE--Fitting or pin on the rudder which turns in a gudgeon.

POOP--The after upper portion of the hull usually containing the steering gear.

PORT AND STARBOARD--Port is the left hand side of the ship looking forward. It is easy to remember port side by this method; Left--four letters. Port four letters.

SHELL PLATING--Consists of rows of plates usually running fore and aft. These rows are called strakes which are numbered alphabetically starting from the keel running outboard and up.

1. STRAKE--Shell plates running fore and aft of ship.

2. KEEL--Plates running fore and aft on the center line from stem to stern.

3. Garboard strake is the shell plating next to the keel.

4. Sheer strake is the row of plates running along the side of a ship at the main deck.

5. Bulwark plate is usually the strake above the sheer strake.

6. Stealer plate is used mostly at the forward end where the strakes are running very narrow. Stealer plate is used to take the width of two strakes.

7. Counter plates are the plates on the center line of the ship from the rudder post to the very after end of the ship which is called the overhang.

8. Rider plate is a plate on top of the floors at the center line running from the tank top to the aftermost floors.

TEMPLATES--A light pattern of a part of a ship. Usually made of thin wood or paper.

1. Mock templates are made in the loft for different parts of the ship where plates have so much curvature that they can not be made flat on the floor.

2. Box mould is used for angle shapes mostly where both flanges want to be shown on one template.

3. Apply template is a small template which is applied to another template, located by the use of set marks.

4. Shape templates are used to give a roll-man or angle-smith the exact shape of plates or bars. (Also called set templates.)

5. Wrap templates are used to wrap around cylinder objects, such as pipes or columns to give the exact cutting line and locations of centers.

ABBREVIATIONS

Abt.	About	Flg.	Flange or Bend
Accom.	Accommodation	Fin.	Finish
A.E. or AE	Aft End	Fl.	Flat
A.P.	After Perpendicular	F.B.	Flat Bar
A.P.	Air Port	F.K.	Flat Keel
Alt.	Alteration	Fl.	Floor
A.W.G.	American Wire Gauge	Fl. Fr.	Floor frame
Amid.	Amidship (middle of boat)	F.	Fore
Amt.	Amount	Fore'l.	Forecastle
Arrgt.	Arrangement	For'd. or Fwd.	Forward
Athws.	Athwartship (across the ship)	F.E.	Forward end
1" Add.	1 inch added for cutting	F.P.	Forward Perpendicular
B.L.	Base Line	Ft.	Foot or feet
		Fnd. or Found.	Foundation
		Fr. and Frs.	Frame and Frames
		F.O.	Fuel Oil

Bm. and Bms.	Beam and Beams	F.T.	Fume tight
Bet.	Between	Galv.	Galvanized
Bev.	Bevel	Gir.	Girder
B.W.G.	Birmingham Wire Gauge	H.R.	Half round
Bot.	Bottom	H.	H. Beam
Bkt.	Bracket	Hd.	Head
B.	Breadth or Beam	H.	Heel
B.A.	Bulb Angle	Hgt.	Height
Bkhd.	Bulkhead	H.P. or HP	Horsepower
Butt	Butt	I	"I" Beam
C.I.	Cast Iron	I.B. or Inbd.	Inboard
C.	Center	In. or "	Inches
C to C	Center to Center	I.B.	Inner Bottom
C.L. or ℄	Center Line	Intercs.	Intercostal
C.V.K.	Center Vertical Keels	JOC.	Joggle
Circ.	Circumference	L. La-A	Angle
Coam.	Coaming	L.	Left.
Coff.	Cofferdam	L.H.	Left Hand
Comp't.	Compartment	L.O.A.	Length over all
Comp.	Composition	Ltd.	Lightened
Cont'd.	Continued	Long.	Longitudinal
Cont.	Continuous	L.F.	Looking Forward
C.S.or Csk.	Countersink	Lr.	Lower
Dk. or D.	Deck	Mach.	Machine
DK. Beam	Deck Beam	Mat'l.	Material
D.	Depth-	Max.	Maximum
D. or Dial.	Diameter	ℳ	Midships
Dbl.	Double	Min.	Minimum
Dblr.	Doubler	Mld.	Molded
Dblg.	Doubling	N.T.	Non-tight
Dwg.or Dr.	Drawing	N.T.D.	Non-tight door
Dr.	Drill	No.	Number
Elev.	Elevation	Nwt.	Nonwatertight
Eng.	Engine or Engineer	O.T.	Oil Tight
E.R.	Engine Room	OPP.	Opposite side
Exp.	Expanded	O.S.	Other side
E.M.	Expanded Metal	O.B.	Outboard
O.A.	Overall	Stg.	Straight
Pr.	Pairs	Str.	Stringer
Pt.	Part	Superstr.	Superstructure
Patt.	Pattern	T.	Tee Bar
Pc.	Piece	Temp.	Template
P.C. M.K.	Piece Mark	Thk.	Thick or Thickness
P.C.	Pitch Circle	T.S.	This side
P.D.	Pitch Diameter	T.S.U.	This side up
P.E.	Plane	Thd.	Thread
Pl. or ▭ or ▭I	Plate	Thds.	Threads
Ptg.	Plating	Trans.	Transverse
Plat. or PLFM.	Platform	U.S.S.	United States Standard.
P. or	Port side	Vent.	Ventilator or Ventilation
P. & S.	Port and Starboard	Vert.	Vertical
R. or Rad.	Radius	V.K.	Vertical Keel
R.W.T.H.	Raised water tight hatch	V.	Void
R.W.T.M.H.	Raised water tight man hole	W.L.	Water line
Req.	Required	W.T.	Water tight
R.P.M.	Revolutions per minute	W.T.D.	Water tight door
R.P.	Rider Plate on V.K.	W.T.F.B.	Water tight flush bolted.
R.	Right		(hatch)
R.H.	Right Hand	Wgt.	Weight
Riv.	Rivet	Z.	Zee Bar
Rm.	Room	Spa.	Spacing
Rd.	Round	Specs.orSpecif.	Specifications
Scr.	Screw	Stan.	Stanchion
∫	Seam	Std.	Standard
S.	Shear line	S. or Stbd.	Starboard side
Sgl.	Single	S.C.	Steel Casting
Spc.	Spaced	Stiff. or stfnr.	Stiffener

LESSON 5

BLUEPRINT READING

All employees of the shipyards from the mechanic's helper or the office stenographer up to foremen and plant managers must be able to read blue prints. The only way of getting work done without having a foreman for each mechanic is to furnish workers with prints showing what work is required. The man who can read prints and skillfully perform the work shown thereon is the man most likely to advance.

The prints for each trade engaged in shipbuilding are just a little different from those for some other trade. Since this course is not confined to any one trade, the reading of blueprints will be treated in a general way outlining the important parts and items that may be found on any print. After this outline, three specimen prints will be used for class discussion covering particularly the parts treated in the outline. The learner is advised that after he is employed in a ship yard he may return to National Defense classes and continue advance study of blueprints applicable to his particular craft or trade.

I. HOW BLUE PRINTS ARE MADE

A. All drawings are started either on drawing paper in pencil or on tracing paper.
   1. After checking it is traced in ink on translucent linen called tracing cloth, or if made on tracing paper originally, it can be used to make a print without further work.
      a. Tracings are used in same manner as a negative is used in photographic work. Prints are made on paper treated with a coating sensitive to light.
      b. The printing is simple. A piece of sensitized paper is placed under the tracing and held in close contact during exposure to light. After exposure, the print is place in water which washes away the unexposed portions which were under the lines of the tracing.
   2. Printing is done in a large machine which prints, washes and dries all in one operation.
      a. The work is moved through these operations on rollers and due to the pulling of the rollers as the paper is soaked and dried, the paper is often stretched and distorted.
      b. THIS IS ONE REASON WHY DIMENSIONS ON BLUEPRINTS MUST NEVER BE SCALED.

II. ELEMENTS OF THE BLUEPRINT

A. THE TITLE BLOCK
   1. The lower right hand corner of drawings is reserved for a title block.
   2. A drawing number which may serve as a part number or as a key to the

MA 3547

CONFIDENTIAL INFORMATION

Regarding

Principal Merchant Ship Types

Constructed Under Contracts

with the

United States Maritime Commission

Giving

Structure, Dimensions, Tonnages, etc.
for each type, with a prototype of each.

Compiled by
Statistics Section
General Engineering Department
Kaiser Company, Inc., Portland Yard
For
Mr. A. R. Nieman
Asst. General Manager
July, 1945

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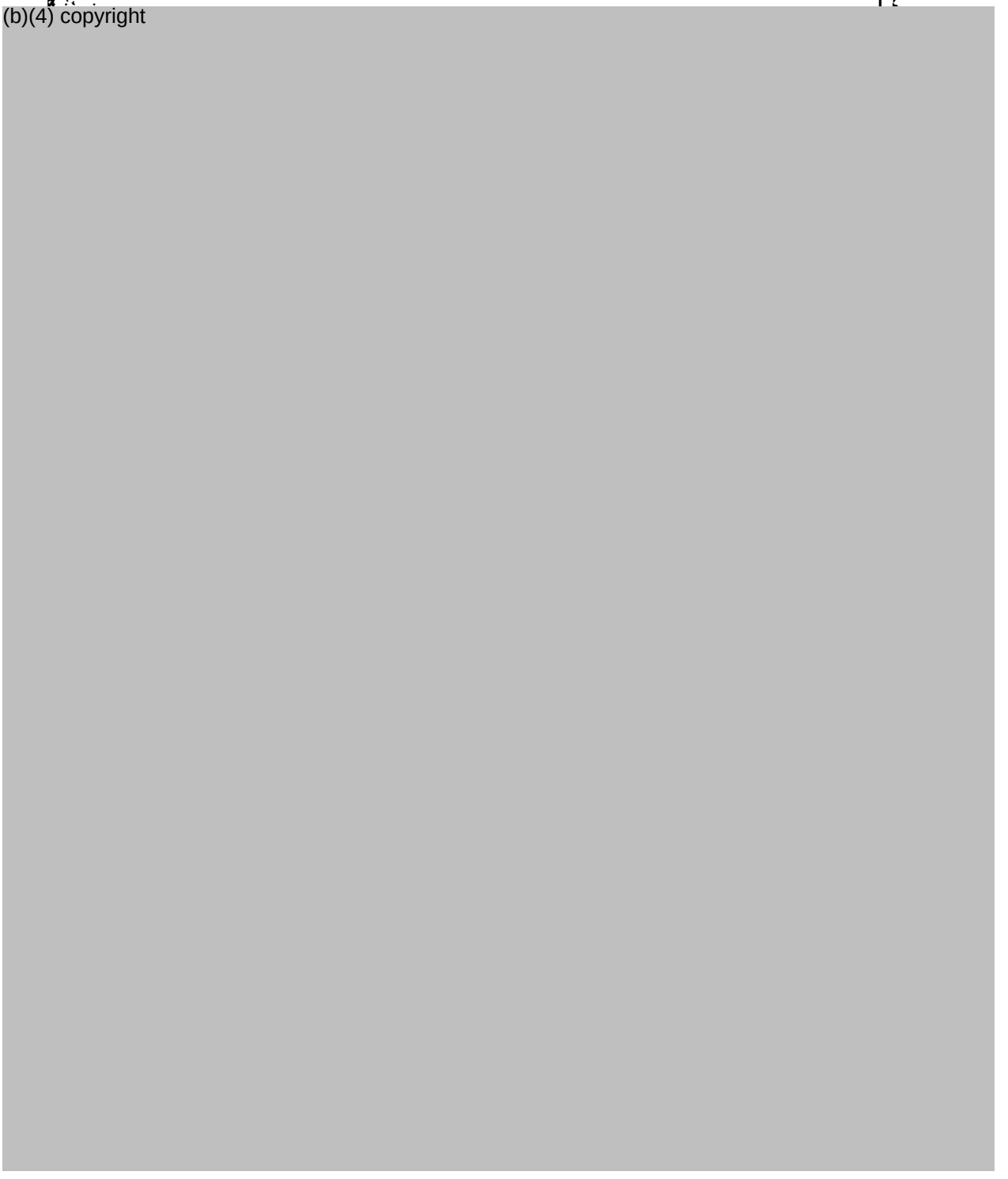

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PROCEDURE REVISION

OREGON SHIPBUILDING CORPORATION

ISSUANCE DATE 6/14/44
8/01/44
10/23/44

VOLUME

SUBJECT DEPARTMENT NUMBERS
In Force Number Sequence

Force	Sub-Dept.	Department	Department Head
		ASSEMBLY	J. Anderson
01	131	Assembly Shop	
01	134	Assembly Engineering	
		BOILER ERECTION	F. Cour
02	241	Boiler Erection	
02	242	Brick Installation	
		ELECTRIC	M. Hord
03	331	Marine Electricians	
03	332	Electric Shop (inc. Tool Shop)	
03	341	Electric Maintenance	
03	523	Electric Engineering	
		ERECTION	O. Wright
04	135	Pre-Erection Assembly	
04	141	Shell Erection	
04	151	Erection - Ways	
04	152	Erection - Dock	
		GUARDS	R. Smith
05	432	Guards (inc. Radio Control)	
		HULL MATERIALS	J. Coombes
06	102	Hull Materials	
		BUILDING MAINTENANCE	W. Haskell
07	443	Janitor Department	
		LABOR	H. Dyhrman
08	442	Yard Clean Up (inc. Tank Cleaners) Ways, Dock & General Yard	

APPROVALS:

Albert Bauer M. Hyman J. Tracy

SUPERSEDING: SECTION 50 DIVISION B PAGE 1

COMPILED BY Bert J. Harris REFERENCE SOURCE _____

PROCEDURE REVISION

—— CONTINUED ——

DATE

6/14/44
10/21/44

Force	Sub-Dept.	Department	Department Head
		MECHANICAL	O. Filion
09	191	Salvage Department	
09	221	Machine Shop	
09	222	Blacksmith Shop	
09	223	Machinery Maintenance	
09	231	Mobile Equipment Maintenance (Garage)	
09	232	Stationary Equipment	
09	233	Equipment Operators & Oil House	
09	317	Pipe Maintenance	
		MARINE	A. Abrahaa
10	201	Port Operations	
10	202	Test Recording and Inspection	
10	261	Marine Installation - Ways	
10	262	Marine Installation - Dock	
10	264	Marine Machine Shop	
10	301	Outfitting Supervision	
10	445	Outfitting Labor	
		MOLD LOFT	W. Torres
11	103	Mold Loft	
		PAINT	K. Gail
12	371	Paint - Ways	
12	372	Paint - Dock	
		PIPE	A Robinson
13	311	Pipe Dept., General	
13	312	Marine Pipe Control	
13	313	Main Pipe Shop	
13	314	Pipe Assembly	
13	315	Dock Pipe Shop	
13	316	Pipe Fabrication Control	
13	321	Pipe Installation - Ways	
13	322	Pipe Installation - Dock	
13	323	Pipe Welding - Ways	
13	324	Pipe Welding - Dock	
		PLATE SHOP	H. Hockett
14	111	Plate Shop (inc Gadget Shop)	
14	112	Template Storage	
14	122	Sub Assembly	

SUPERSEDING:

SECTION 60
DIVISION 8
PAGE 2

OREGON SHIPBUILDING CORPORATION

DATE
6/14/44
10/23/44

Force	Sub-Dept.	Department	Department Head
		RIGGING	J. Butler
15	132	Assembly Rigging	
15	361	Rigging Loft	
15	362	General Rigging	
15	363	Mast Yard	
		RIVETING	J. McGregor
16	137	Pre-Erection Riveting & Chipping	
16	144	Shell Erection Riveting & Chipping	
16	161	Riveting & Chipping - Ways	
16	162	Riveting & Chipping - Dock	
		SHEET METAL	V. Nelson
17	351	Sheet Metal Shop	
		SHIPWRIGHT	R. Hausmann
18	138	Pre-Erection Shipwright	
18	145	Shell Erection Shipwright	
18	181	Shipwright - Ways	
18	182	Shipwright - Dock	
18	381	Carpenter Shop	
		UNIONMELT	R. Steiner
19	133	Unionmelt - Assembly	
19	143	Unionmelt - Shell Erection	
		VOCATIONAL TRAINING	
20	462	Welding School	A. Oakes
20	463	Test Shop	V. Berry
		WAREHOUSING	R. Walker
21	411	Materials Department	
21	412	Receiving	
21	413	General Stores	
21	414	Fitting Stores	
21	415	City Warehouse	
21	416	Yard Stores (Outside Storage)	
21	417	Tool Control	
21	418	Steel Yard	
21	419	Lumber Storage	
21	421	Transportation (Materials)	

SUPERSEDING:

SECTION 60
DIVISION B
PAGE 3

PROCEDURE REVISION

DATE:

Force	Sub-Dept.	Department	Department Head
		WELDING	W. Heilig
22	136	Pre-Erection Welding & Burning	
22	142	Shell Erection Welding & Burning	
22	171	Welding - Ways	
22	172	Welding - Dock	
22	173	Burning - Ways	
22	174	Burning - Dock	
		MISCELLANEOUS YARD	
23	101	Hull Control	T. Dunkin
23	401	Yard Management	R. Hoffman
23	402	Production Records	C. Hamilton
23	431	Safety Department	H. Ahlen
		Plant Protection	W. Long
23	433	First Aid	
23	434	Fire Department	H. Ahlen
23	446	Facilities Maintenance	C. Kinman
23	528	Hull Engineering	D. Rotto

* * * * * * * *

		MANAGEMENT	
24	511	Management, General	A. Bauer
		Priority Dept.	H. Nelson
		Public Relations	H. Babbitt
24	512	Administration, General	A. MacGregor
24	513	Legal Department	O. Sirnio
24	514	Insurance	T. Woodell
		Suggestions	H. Schmidt
		Health & Hygiene	Dr. Rieke
		ENGINEERING	
24	521	Engineering, General	V. Palmer
		Reproduction	F. Alexander
24	522	Design Engineering, General	R Cook
24	524	Marine Engineering	R. Boyd
24	525	Naval Architecture	R. Nyborg
24	526	Progress	
24	527	Vessels Delivery	D. Haines

SUPERSEDING { SECTION / DIVISION 60 / PAGE B 4

Oregon Shipbuilding Corporation
BC 1

PROCEDURE REVISION

DATE (4) Jan. 1, 1945

—— CONTINUED ——

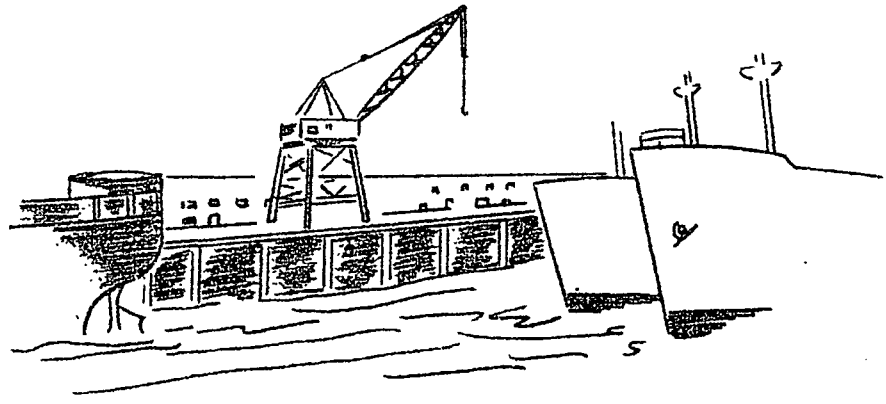
Force	Sub-Dept	Department	Department Head
		PERSONNEL	
24	531	Personnel Department AF of L Office; Couselor Service	R. Hadley
24	533	Housing	H. Young
24	534	Transportation (Employes)	R. Collett
24	535	Clearance Office	V. Kinkade
24	536	Rate Control Field Section	J. Cooke E. Thomason
24	538	Induction Training	H. Reif
24	539	Child Service Center	N. Clancey
		PAYROLL & TIMEKEEPING	
24	541	Payroll	R. Kendler
24	542	Time	C. Stanley
24	543	Tabulating	N. Cartwright
24	544	Employes Records	C. Stanley
		GENERAL & COST ACCOUNTING	
24	551	Accounting	V. Thompson
24	553	Invoice Audit	O. Chapin
24	555	Cost Department Field Cost Section	J. Lacey W. McDonald
		PURCHASING & EXPEDITING	
24	561	Purchasing	F. McClintock
24	562	Expediting Field Expediting	D. Jaxtheimer K. Hedges
24	563	Traffic	L. Damon
		WAR BONDS	
24	571	War Bond Accounting	P. Bliss
24	572	War Bond Sales	K. Moyer
		GENERAL	
24	581	Telephone	C. Newell
24	583	Master File	D. Paroher
24	584	Stationery Supplies & Messenger Service	L. Owre
24	585	Records Storage (Downtown)	J. O'Conner
24	586	Chief Clerk of Admin. Offices	H. Steele
24	587	Duplicating (Mimeograph & Ditto)	L. Owre

SUPERSEDING: 60
SECTION B
DIVISION 5
PAGE

OREGON SHIPBUILDING CORPORATION
X-BC-10

DOCK FIRE REPORT

AUGUST 30, 1945



OREGON SHIPBUILDING CORPORATION

PORTLAND, OREGON

Oregon Shipbuilding Corporation
September 9, 1945

SURVEY OF USS BEXAR

MCV HULL No. 861
OSC HULL No. 1132
US NAVY APA 237

Date of Survey: 9-6-45, 10:25 a.m. to 3:45 p.m.

Location of Survey: Port of Portland - Terminal #4

Purpose of Survey: To determine damage done to vessel and extent of work to be done to restore vessel to condition it was prior to fire at Outfitting Dock at the Oregon Shipbuilding Corporation, August 30, 1945.

Representatives on Board of Survey:

United States Maritime Commission:

H. A. Mortensen, Director of Survey, Head Hull Inspector
Earl Bateman, Senior Hull Inspector
Ted Mills, Senior Hull Inspector
T. J. Fraser, Head Machinery Inspector
Peter Muntz, Acting Head Machinery Inspector

United States Navy:

Lt. W. Farnham, USNR

American Bureau of Shipping:

Charles R. Hudson
Joe Long
A. A. McCoy

Oregon Shipbuilding Corporation

William Schinkel
Harvey Hautala
Robert Nyborg
Ralph Boyd
Don Rotte
Dave White
William Goe, Recorder
John Fattu, Photographer

Representatives on Board of Survey: (Continued)

Insurance Company:

R. A. Webb - U.S. Salvage Association
H. E. Warkman - London Salvage Association

Cont:

In addition there has been an independent survey made August 31, 1945 by A. Gutierrez, Chief Gunner, U.S.N. Ordnance, and presented for incorporation within by Lt. W. Farnham, USNR.

SURVEY OF USS BEXAR

MCV Hull No. 861
OSC Hull No. 1132
US Navy APA 237

United States Maritime Commission:

(signed) — Sept. 11, 1945
E. A. Mortensen — Date
Head Hull Inspector

(signed) — Sept. 11, 1945
Peter Muntz — Date
Acting Head Machinery Inspector

American Bureau of Shipping:

(signed) — Sept. 11, 1945
Charles R. Hudson — Date
Senior Surveyor

United States Navy:

(signed) — Sept. 11, 1945
Lt. W. Farnham, USNR — Date

United States Coast Guard:

Lt. Commander J. H. Fischer — Date

Oregon Shipbuilding Corporation:

(signed) — Sept. 11, 1945
William Schinkel — Date
Hull Superintendent

Insurance Companies

(signed) — Sept. 12, 1945
A. A. Webb — Date
U. S. Salvage Association

(signed) — Sept. 12, 1945
H. E. Workman — Date
London Salvage Association

WAYS EXCAVATION, DIKE, AND DREDGE FILL

DATE 2-25-41

OREGON SHIPBUILDING CORPORATION

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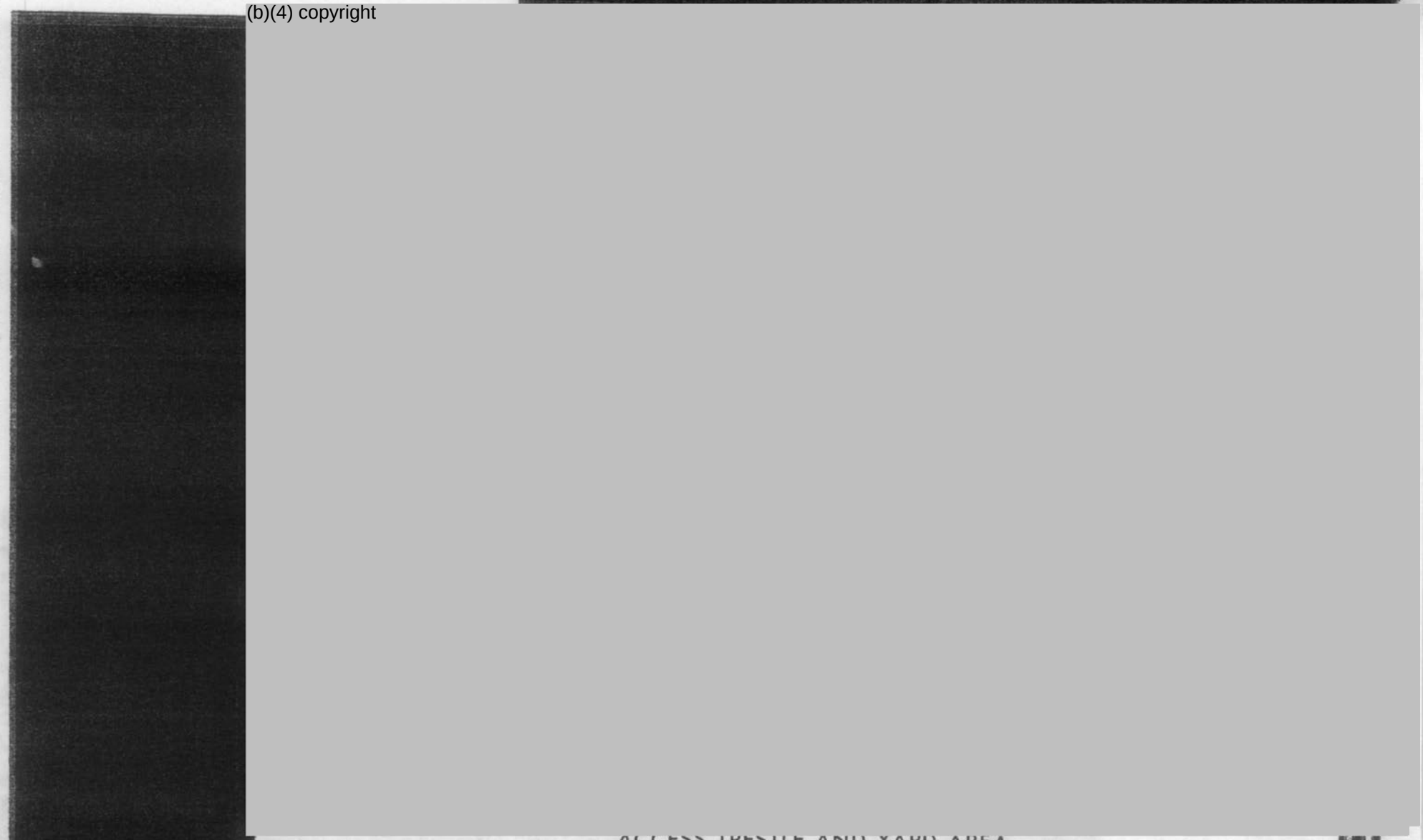

DATE 2-25-41

ACCESS TRESTLE AND YARD AREA
OREGON SHIPBUILDING CORPORATION

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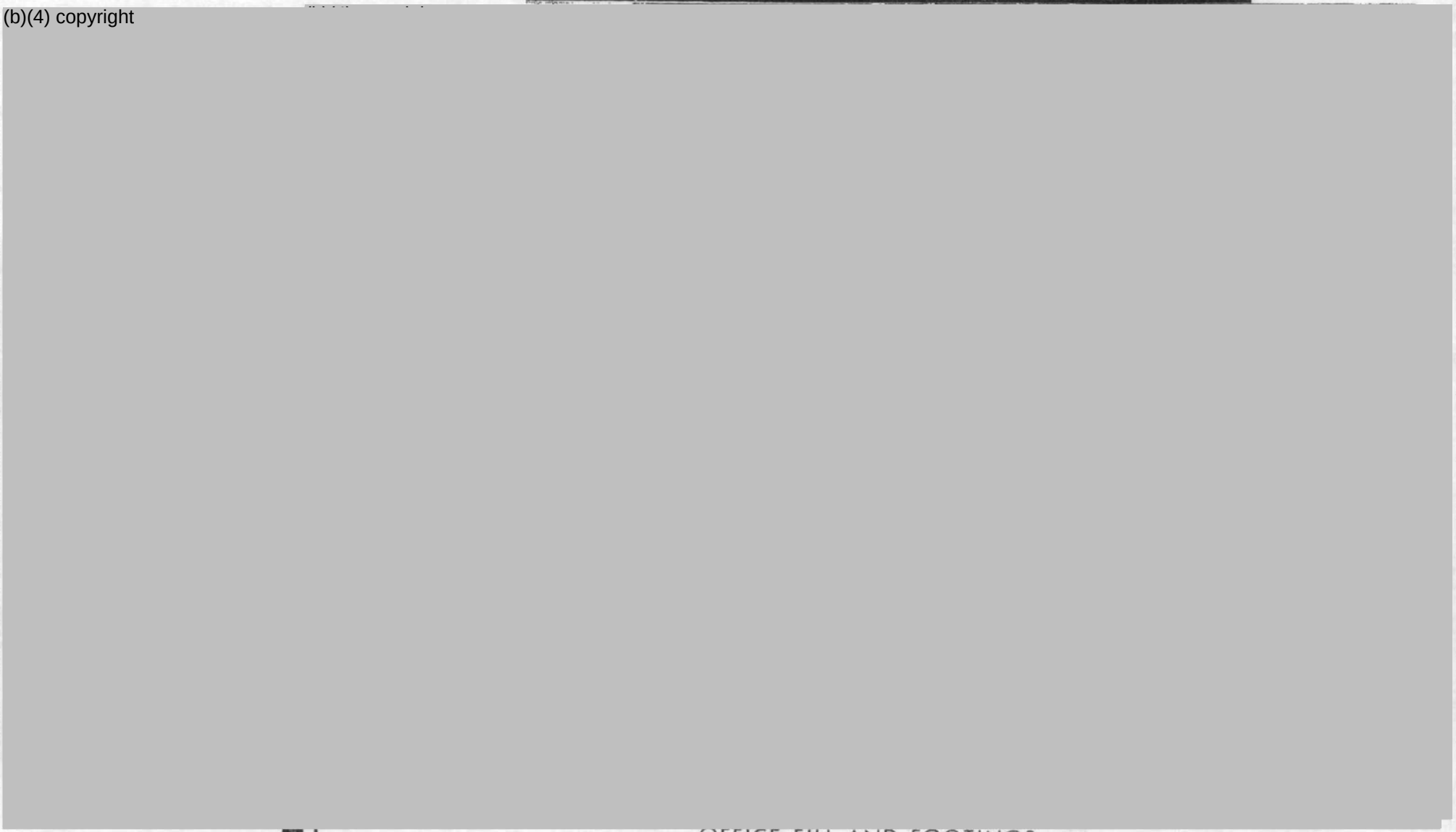

PHOTO NO. 15 DATE 2-28-41

OFFICE FILL AND FOOTINGS
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 19

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DATE 2-28-41

DREDGE LINES FOR FILL
OREGON SHIPBUILDING CORPORATION

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PHOTO NO. 24 | DATE 3-12-41

PILING — No. 9 CRANEWAY — No. 8 WAY
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 33

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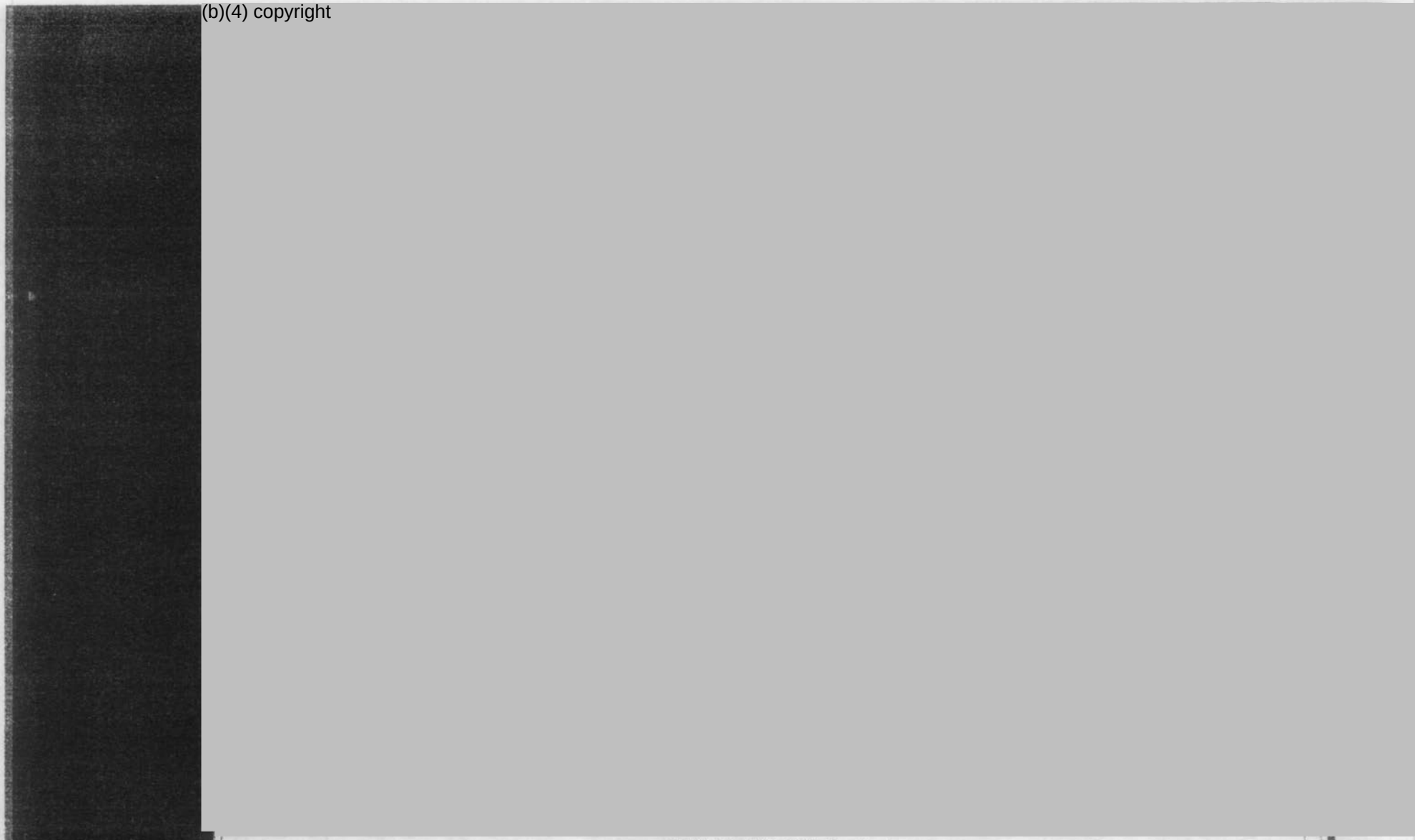

DATE 3-12-41

PILING WAYS 8, 7, 6
OREGON SHIPBUILDING CORPORATION

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PILING IN OUTBOARD AND BUILDING WAYS

DATE 4-11-41

OREGON SHIPBUILDING CORPORATION

PHOTO NO. 60

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SCHN00015380

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DATE 4-19-41

LOOKING EAST ALONG FITTING BASIN
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 71 DATE

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DATE 4-26-41

DREDGING IN FITTING BASIN
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 84

Portland (Oregon) - Oregon Shipbuilding Corp.

#2209-79

APR 20 1941

3 col Sun Morning

Ore Shipbuilding Corp

AWAITING MEN, MATERIALS

All Portland shipbuilding stands by awaiting machine tools, machinery and men—deficiencies national in scope but which may cause a serious curtailment in local production capacity. Above, view of four virtually completed shipways of the [illegible] to be built at the Oregon Shipbuilding corporation site.

OR. [illegible] ERNAL
Photo

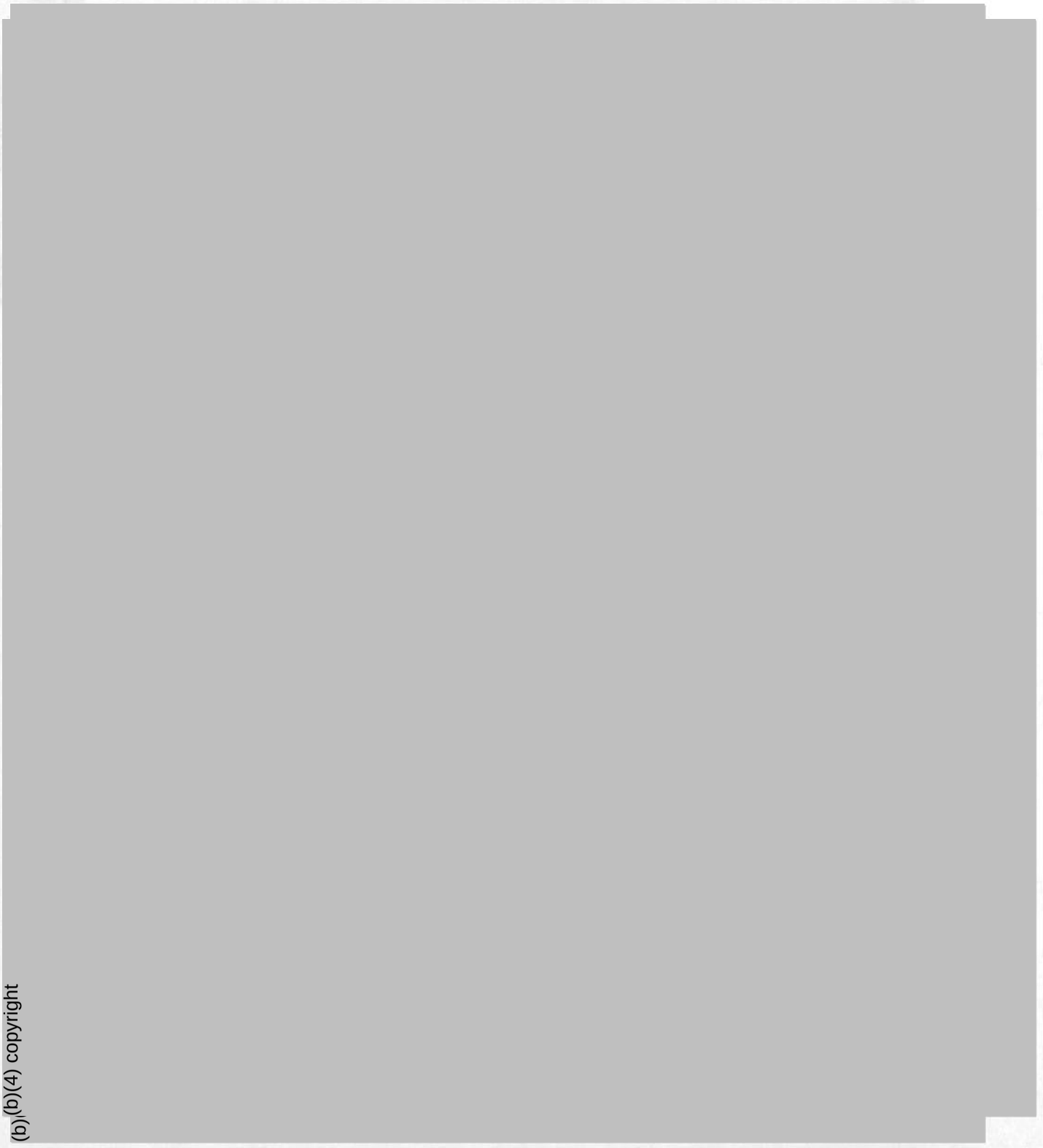
Orlk 36427

SCHN00015384

(7)

~~#1254-15~~
#2209.77

Kaiser shipyards
in W.II



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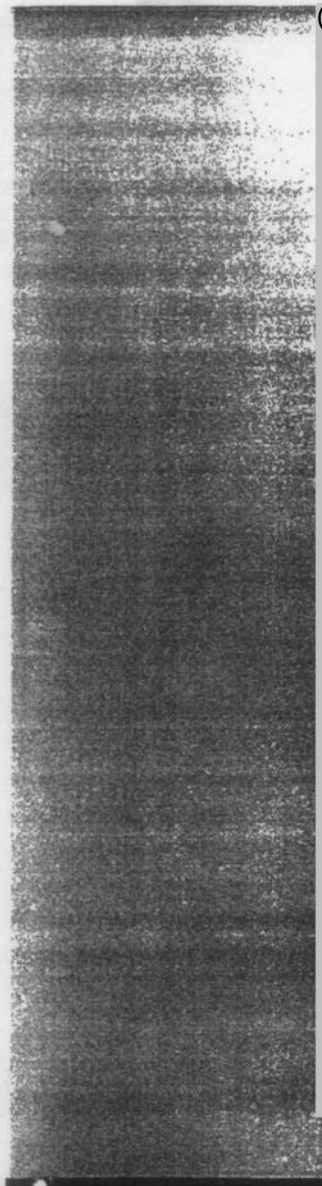

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DATE 2-25-41

OREGON SHIPBUILDING CORPORATION

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DATE 2-25-41

ACCESS TRESTLE AND YARD AREA
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 15

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PHOTO NO. 15 DATE 2-28-41

OFFICE FILL AND FOOTINGS
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 19

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DATE 2-28-41

DREDGE LINES FOR FILL
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 24

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PHOTO NO. 24 | DATE 3-12-41

PILING — No. 9 CRANEWAY — No. 8 WAY
OREGON SHIPBUILDING CORPORATION

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DATE 3-12-41

PILING WAYS 8, 7, 6
OREGON SHIPBUILDING CORPORATION

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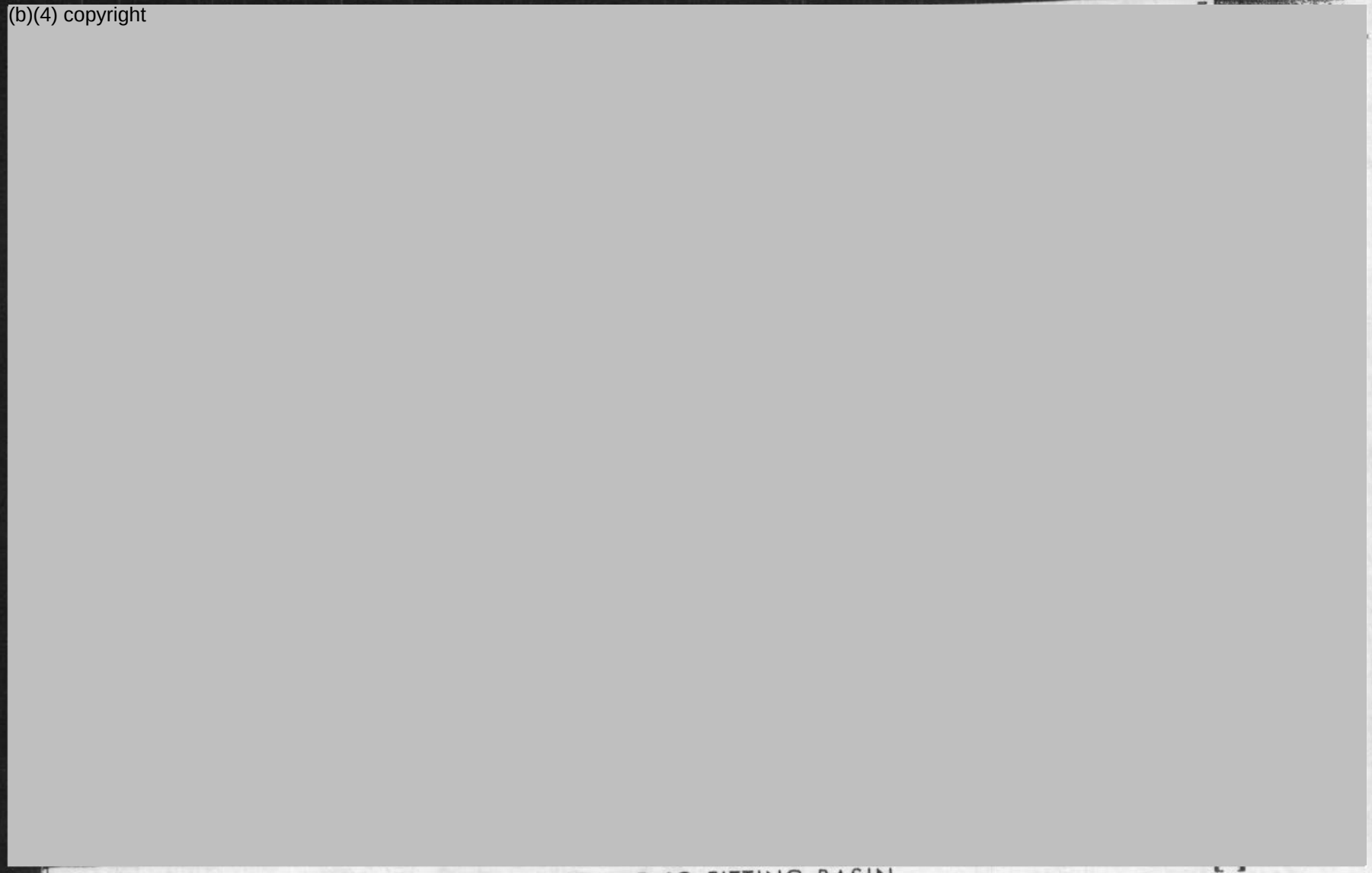
PILING IN OUTBOARD AND BUILDING WAYS
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 60 D



DATE 4-19-41

LOOKING EAST ALONG FITTING BASIN
OREGON SHIPBUILDING CORPORATION

PHOTO NO. 71[ ] DATE

DATE 4-26-41

DREDGING IN FITTING BASIN
OREGON SHIPBUILDING CORPORATION

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U. S. DEPARTMENT OF COMMERCE
MARITIME ADMINISTRATION
GENERAL FILES SECTION

FILE NO. L11-4-10

PART 16

FROM 12-1-65 TO 6-30-66

6-30-66

L11-4-10- SALE OF VESSELS FOR SCRAPPING
Part 16

MAR000020

SCHN00015484

NAME OF AGENCY: MARITIME ADMINISTRATION

PRECEDENCE
ACTION:
INFO..

SECURITY CLASSIFICATION

TYPE OF MESSAGE
[X] SINGLE [ ] BOOK
[ ] MULTI-ADDRESS

ACCOUNTING CLASSIFICATION

THIS BLOCK FOR USE OF COMMUNICATIONS UNIT

1965 DEC 30 PM 2 18

FPD H HD

STANDARD FORM 14 REV MARCH 15, 1957
GSA REGULATION 2-IX-203 04
14-303

TELEGRAPHIC MESSAGE
OFFICIAL BUSINESS
U. S. GOVERNMENT

MESSAGE TO BE TRANSMITTED (Use double spacing and all capital letters)

RECD-EST
MARAD TELETYPE UNIT
WASHINGTON

THIS COL. FOR AGENCY USE

START MESSAGE ADDRESS HERE

TELEGRAM

FPD

AMERICAN SHIP DISMANTLERS, INC.
3300 N. W. YEON AVENUE
PORTLAND, OREGON 97210

DEPARTMENT OF COMMERCE (MARITIME ADMINISTRATION) HEREBY ACCEPTS URBID DATED 12-23-65 FOR PURCHASE SSs KIT CARSON AND RALPH T. O'NEIL IN LUMP SUM AMOUNT OF $91,000 SUBJECT TO TERMS INVITATION FOR BIDS PD-X-709. CONTRACT ASSIGNED NO. MA-4023. LETTER FOLLOWS.

H. E. STEFFES, CHIEF
OFFICE OF PROPERTY AND SUPPLY

cc:

Communications
101
300/341
300/351
300/361
400/420
400/425
520
523/Div. File
528 (2)
539
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CPfeffer/sa

DO NOT TYPE MESSAGE BEYOND THIS LINE

RECD-EST
MARAD TELETYPE UNIT
WASHINGTON
1965 DEC 30 PM 2 49

DISPATCHED

PAGE NO 1 | NO. OF PAGES 1

NAME AND TITLE OF ORIGINATOR (Type)
C. PFEFFER, SHIP SALES AND DISPOSAL BRANCH

ORIGINATOR'S TEL NO
4772

DATE AND TIME PREPARED
12-30-65 1:30 P.M.

SECURITY CLASSIFICATION

I certify that this message is official business, not personal, and is in the interest of the Government

(Signature)

U.S. GOVERNMENT PRINTING OFFICE 1959 O—513800

MAR000021

SCHN00015485

OREGON SHIPWRECKERS, INC.

1-CONTRACT: 2/29/68 MA-4497 Sale of ships SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, MONTANA, LAKELAND VICTORY, and WISTERIA, Bills of Sale, Performance Bond for $350,000, executed by
Zidell Machinery & Supply Co.,
Zidell Explorations, Inc.
American Ship Dismantlers, Inc., and Leonard Schnitzer

MAR000668

SCHN0016612

FORM MA-37
(4-68)

U.S. DEPARTMENT OF COMMERCE
MARITIME ADMINISTRATION

NUMBER: PD-X-793

DATE: May 2, 1968

DOCUMENT TRANSMITTAL

TO : Division of Accounts
Attention: Chief, Securities and Cash Receipts Branch

FROM: Chief, Ship Sales and Disposal Branch

THE FOLLOWING LISTED DOCUMENTS ARE ATTACHED

For safekeeping

NUMBER AND DATE	DESCRIPTION AND REMARKS	AMOUNT

I. Oregon Shipwreckers, Inc.

a. Counterpart I of Contract MA-4497, dated February 29, 1968, covering the SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, MONTANA, LAKELAND VICTORY, and WISTERIA.

b. One counterpart of each of the Bills of Sale.

c. Performance Bond in the penal sum of $350,000, executed on February 29, 1968, by Zidell Machinery & Supply Co. and Zidell Explorations, Inc., 3121 S. W. Moody Avenue, Portland, Oregon 97201, and American Ship Dismantlers, Inc. and Messrs. Leonard, Morris, Manuel, and Gilbert Schnitzer, 3300 N. W. Yeon Avenue, Portland, Oregon 97210, as Sureties, to secure the terms of Contract MA-4497.

M. C. Doty

MAR000669

ABOVE LISTED DOCUMENTS RECEIVED BY *(Sign duplicate copy only)*

Signature _____ Date _____

DISTRIBUTION

The sender will list documents to be transferred between offices on this form, in triplicate; attach original and duplicate copies to documents and retain triplicate copy. The receiver will receipt the duplicate copy and return to sender. The sender will destroy triplicate copy when receipted duplicate copy is received.

USCOMM-DC 10908-P66

SCHN00016613

December 24, 1968

360(S)

AIRMAIL

Oregon Shipwreckers, Inc.
3121 S. W. Moody Avenue
Portland, Oregon 97201

Gentlemen:

Subject: Performance Bond - $350,000 - Contract MA-4497 - PD-X-793 - SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, WISTERIA, LAKELAND VICTORY, and MONTANA

The subject Performance Bond secures the obligations of Oregon Shipwreckers, Inc. under Contract MA-4497, dated February 29, 1968, covering sale of seven ships including the SSs MARISCAL SUCRE and WALTER COLTON. Previously the Performance Bond has been reduced by the amount of $250,000 due to the scrapping of five of the ships.

Based upon additional certified evidence you currently presented us, all the obligations and agreements set forth in Contract MA-4497 with respect to the last two ships, the MARISCAL SUCRE and WALTER COLTON have been performed and observed.

Accordingly, you may consider both Principal and Sureties fully released under the subject bond.

Sincerely yours,

M. C. Doty
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

cc:
360
360 (CF)
5781

CWSchumacher/ro

MAR000670

SCHN00016614

DEC 24 1968

Chief Ship Sales and Disposal Branch

360(S)

Ship Sales Specialist (Sales)

Performance Bond $350,000 - SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, WISTERIA, LAKELAND VICTORY, and MONTANA - Contract MA-4497, dated February 29, 1968 - PD-X-793

Purpose

To consider and recommend release of Principal and Surety from further liability under the subject performance bond.

Discussion

On February 29, 1968, the subject ships were awarded to Oregon Shipwreckers, Inc. for scrapping. The full purchase price of $356,898.99 and a Performance Bond in the amount of $350,000 to secure the terms of Contract MA-4497 were duly received. To the present time, the subject bond has been reduced by $250,000 due to the complete scrapping of five of the ships. Our Marine Surveyors now report that the SSs MARISCAL SUCRE and WALTER COLTON have been completely scrapped*. The buyer removed metallic ballast from the SS WISTERIA consisting of 592.236 long tons of pig iron ballast, for which he paid the Government at the rate of $25 per ton the amount of $14,805.90.

The Buyer has submitted certifications to indicate full compliance with and observance of all the terms and conditions of Sales Contract MA-4497. We are satisfied that all scrapping obligations have been fulfilled within the contract time: and, therefore the Principal and Surety may be fully released under the subject performance bond.

Recommendation:

It is recommended that authorization be given to notify Zidell Machinery & Supply Co., Zidell Explorations, Inc., American Ship Dismantlers, Inc., and Messrs. Leonard, Morris, Manuel, and Gilbert Schnitzer, Sureties on the subject performance bond, that, based on certified evidence presented to us by the Principal, Oregon Shipwreckers, Inc., all the obligations and agreements set forth in Contract MA-4497, dated February 29, 1968, have now been performed and observed. Accordingly, both Principal and Surety may be considered fully released under the bond.

*These are the last two ships.

No legal objection:

C. B. Pfeffer
Approved:

Original Signed A. P. Fitts DEC 24 1968

Deputy General Counsel Date Chief, Ship Sales and Disposal Branch Date

A. Natanson Acting

cc: 201 360 360(CP) 578 CWSchumacher/ro

MAR000671

SCHN00016615

115

FEBRUARY 27 1968

SECRETARY CODE 115

MARITIME ADMINISTRATION

WASHINGTON DC

TT-13

REFERENCE BID INVITATION PD-X-793 DATED FEBRUARY 6 1968 OPENING FEBRUARY 27 1968 AT 2:30 PM EST WE HEREBY INCREASE OUR ALTERNATE LUMPSUM BID BY THE AMOUNT OF TWENTY THOUSAND ($20,000.00) DOLLARS

OREGON SHIPWRECKERS, INC. EMERY ZIDELL

1968 FEB 27 11 12 55

PLS ACK CLEAR RECEIPT GA

G

DID YOU RECEIVE OK GA

PNXMARAD WASHDC

MARADM NEW YORK NY

MAR000672

SCHN00016616

September 18, 1968

360(S)

AIR MAIL

Zidell Machinery & Supply Co.
3121 S. W. Moody Avenue
Portland, Oregon 97201

Oregon Shipwreckers, Inc.
3200 N. W. Yeon Avenue
Portland, Oregon 97210

Gentlemen:

Subject: Performance Bond - $350,000 - Contract MA-4497 - PD-X-793 - SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, WISTERIA, LAKELAND VICTORY and MONTANA

The subject Performance Bond executed by Zidell Machinery & Supply Co., as Surety, secures the obligations of Oregon Shipwreckers, Inc., under Contract MA-4497, dated February 29, 1968, covering sale of seven ships including the SS MONTANA. The Contract provides for reduction in the amount of the bond for each ship scrapped on the basis of $50,000 per ship. Previously the Performance Bond has been reduced by the amount of $50,000 due to the scrapping of the SS SAMPEP.

Based upon additional certified evidence currently presented to us by the Principal, Oregon Shipwreckers, Inc., all the obligations and agreements set forth in Contract MA-4497 with respect to the SS MONTANA have now been performed and observed. Therefore it is in order to further reduce the Performance Bond by the amount of $50,000, leaving a balance of $250,000 to secure the remaining obligations under the contract.

Sincerely yours,

Orig. signed A. H. Foltz

A. H. Foltz
Acting Chief, Ship Sales and
Disposal Branch
Division of Reserve Fleet

cc:
360
360(CP)
578 ✓ CWSchumacher/dw

MAR000673

SCHN00016617

October 21, 1966

360(S)

AIRMAIL

Oregon Shipwreckers, Inc.
3121 S. W. Moody Avenue
Portland, Oregon 97201

Gentlemen:

Subject: Performance Bond - $350,000 - Contract MA-4497 - PD-X-793 - SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, WISTERIA, LAKELAND VICTORY, and MONTANA

The subject Performance Bond secures the obligations of Oregon Shipwreckers, Inc. under Contract MA-4497, dated February 28, 1966, covering sale of seven ships including the SS WISTERIA. The contract provides for reduction in the amount of the bond for each ship scrapped on the basis of $50,000 per ship. Previously the Performance Bond has been reduced by the amount of $200,000 due to the scrapping of four ships.

Based upon the additional certified evidence you currently presented to us, all the obligations and agreements set forth in Contract MA-4497 with respect to the SS WISTERIA have now been performed and observed. Therefore it is in order to further reduce the Performance Bond by the amount of $50,000 leaving a balance of $100,000 to secure the remaining obligations under the contract.

Sincerely yours,

Original Signed M. C. Doty

M. C. Doty
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

cc:
Zidell Explorations, Inc.
Zidell Machinery & Supply Co.
American Ship Dismantlers, Inc.
Messrs. Leonard, Morris, Manuel, and
Gilbert Schnitzer

360
360 (CF)
578

Schumacher/ro

MAR000674

SCHN00016618

August 30, 1968

360(S)

AIR MAIL

Zidell Machinery & Supply Co.
3121 S. W. Moody Avenue
Portland, Oregon 97201

Oregon Shipwreckers, Inc.
3121 S. W. Moody Avenue
Portland, Oregon 97201

Gentlemen:

Subject: Performance Bond $350,000 - Contract MA-4497, PD-X-793 - Sale of the SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, WISTERIA, LAKELAND VICTORY, and MONTANA

The subject Performance Bond executed by Zidell Machinery & Supply Co., as Surety, secures the obligations of Oregon Shipwreckers, Inc., under Contract MA-4497, dated February 29, 1968, covering sale of seven ships including the SS SAMPEP. The Contract provides for reduction in the amount of the bond for each ship scrapped on the basis of $50,000 per ship.

Based upon additional certified evidence currently presented to us by the Principal, Oregon Shipwreckers, Inc., all the obligations and agreements set forth in Contract MA-4497 with respect to the SS SAMPEP have now been performed and observed. Therefore it is in order to reduce the Performance Bond by the amount of $50,000, leaving a balance of $300,000 to secure the remaining obligations under the contract.

Sincerely yours,

M. C. Doty
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

cc:
360
(CP)

.r/dw

MAR000675

SCHN00016619

October 7, 1968

S&O(S)

AIRMAIL

Oregon Shipwreckers, Inc.
3121 S. R. Moody Avenue
Portland, Oregon 97201

Gentlemen:

Subject: Performance Bond - $350,000 - Contract MA-4497 - PD-X-793 - SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, WISTERIA, LAKELAND VICTORY, and MONTANA

The subject Performance Bond secures the obligations of Oregon Shipwreckers, Inc. under Contract MA-4497, dated February 29, 1968, covering sale of seven ships including the SS LAKELAND VICTORY. The contract provides for reduction in the amount of the bond for each ship scrapped on the basis of $50,000 per ship. Previously the Performance Bond has been reduced by the amount of $150,000 due to the scrapping of three ships.

Based upon the additional certified evidence you currently presented to us, all the obligations and agreements set forth in Contract MA-4497 with respect to the SS LAKELAND VICTORY have now been performed and observed. Therefore, it is in order to further reduce the Performance Bond by the amount of $50,000 leaving a balance of $150,000 to secure the remaining obligations under the contract.

Sincerely yours,

Original Signed M. C. Doty

M. C. Doty
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

cc
Zidell Explorations, Inc.
Zidell Machinery & Supply Co.
American Ship Dismantlers, Inc.
Messrs. Leonard, Morris, Manuel, and
Gilbert Schnitzer

360
360 (CP)
578

CWSChumacher/ro

MAR000676

SCHN00016620

DEPARTMENT OF COMMERCE
MARITIME ADMINISTRATION

FORM OF BID
(SUBMIT IN TRIPLICATE)

OREGON SHIPWRECKERS, INC.
(NAME OF BIDDER)

3121 S.W. Moody Avenue
(STREET ADDRESS)

Portland (CITY) Oregon (STATE) 97201 (ZIP CODE)

February 23, 1968
(DATE)

SECRETARY, MARITIME ADMINISTRATION
U. S. DEPARTMENT OF COMMERCE
GENERAL ACCOUNTING OFFICE BLDG., ROOM 3041
WASHINGTON, D. C. 20235

IN RESPONSE TO YOUR INVITATION FOR BIDS NO. PD-X-793, DATED Feb. 6, 1968, INFORMATION AND INSTRUCTIONS TO BIDDERS, AND THE FOLLOWING ADDENDA (IF ANY) ISSUED PURSUANT TO SAID INVITATION:

(1) ADDENDUM NO. _____ DATED: _____
(2) ADDENDUM NO. _____ DATED: _____

ALL OF WHICH BY THIS REFERENCE ARE INCORPORATED HEREIN AND MADE A PART HEREOF, AND SUBJECT TO ALL THE TERMS AND CONDITIONS THEREOF, THE UNDERSIGNED HEREBY OFFERS TO PURCHASE THE FOLLOWING Lots of ships for the following amount(s):

SHIP and Lot No.	AMOUNT BID FOR LOT	SHIP and Lot No.	AMOUNT BID FOR LOT
* Lot No. 1	— $ 2.00	* Lot No. 3	— $3.00
(SS MARISCAL SUCRE)		(SS MONTANA)	
(SS WALTER COLTON)		(SS LAKELAND VICTORY)	
		(SS WISTERIA)	
* Lot No. 2	— $2.00	* SEE ADDENDUM ATTACHED.	
(SS SAMPER)			
(SS RUFUS C. DAWES)			

NOTE: IF BIDS ARE SUBMITTED ON MORE THAN ONE lot, THE BIDDER MUST INDICATE THE TYPE OF AWARD IT IS WILLING TO ACCEPT BY PLACING AN "X" OR THE APPROPRIATE NUMBER, AS THE CASE MAY BE, IN THE PROPER SPACE BELOW. IN THE ABSENCE OF ANY INDICATION, IT WILL BE ASSUMED THAT THE BIDDER IS WILLING TO ACCEPT AN AWARD OF ALL OR ANY OF THE lots. SEE SECTION II OF THE INVITATION.

(a) ALL lots only ( ) (b) ALL lots or any (X)

(c) ANY lots but not more than ____ (d) ANY lots but not less than ____

(e) ANY lots but not more than ____ NOR LESS THAN ____ lots

NOTE: IF THE AGGREGATE AMOUNT OF THIS BID EXCEEDS $25,000 THE BIDDER MUST COMPLETE THE FOLLOWING STATEMENTS BY CHECKING THE APPROPRIATE BOX.

THE UNDERSIGNED BIDDER REPRESENTS: (a) THAT HE/[ ] HAS, [X] HAS NOT, EMPLOYED OR RETAINED ANY COMPANY OR PERSON (OTHER THAN A FULL-TIME BONA FIDE EMPLOYEE WORKING SOLELY FOR THE BIDDER) TO SOLICIT OR SECURE THIS CONTRACT; AND (b) IT HAS[ ], HAS NOT[X], PAID OR AGREED TO PAY TO ANY COMPANY OR PERSON (OTHER THAN A FULL-TIME BONA FIDE EMPLOYEE WORKING SOLELY FOR THE BIDDER) ANY FEE, COMMISSION, PERCENTAGE OR BROKERAGE FEE, CONTINGENT UPON OR RESULTING FROM THE AWARD OF THIS CONTRACT, AND AGREES TO FURNISH INFORMATION RELATING THERETO AS REQUESTED BY THE DEPARTMENT OF COMMERCE, MARITIME ADMINISTRATION. (NOTE: FOR INTERPRETATION OF THE REPRESENTATION, INCLUDING THE TERM "BONA FIDE EMPLOYEE," SEE GENERAL SERVICES ADMINISTRATION REGULATIONS, TITLE 44, SECS. 150.7 AND 150.5 (b) FED. REG. DEC. 31, 1952, VOL. 17, NO. 253.)

MAR000677

SCHN00016621

THE UNDERSIGNED CERTIFIES THAT THE BIDDER IS A CITIZEN OF THE UNITED STATES OF AMERICA AS DEFINED AND WITHIN THE MEANING OF SEC. 2 OF THE SHIPPING ACT, 1916, AS AMENDED (46 U.S.C. 802).

IN ACCORDANCE WITH THE TERMS OF THE SUBJECT INVITATION, THERE IS ENCLOSED THE REQUIRED BID GUARANTY CONSISTING OF: BID BOND

(1) OREGON SHIPWRECKERS, INC.
(NAME OF BIDDER)

BY: [signature] President
(SIGNATURE AND TITLE)

(2) IN THE PRESENCE OF:

(NAME)

(ADDRESS)

(3) ATTEST:
(AFFIX CORPORATE SEAL)

[signature]
(NAME AND TITLE)

A. J. Laue = Registered Agent

(1) FOR USE BY INDIVIDUAL BIDDER OR BY OFFICIAL AUTHORIZED TO SIGN ON BEHALF OF PARTNERSHIP OR CORPORATION.
(2) FOR USE BY WITNESS IN CASE BIDDER IS AN INDIVIDUAL OR PARTNERSHIP.
(3) FOR USE BY ATTESTING OFFICIAL IN CASE BIDDER IS A CORPORATION.

FORM OF ACCEPTANCE

DATE February 29, 1968

THE UNITED STATES OF AMERICA, REPRESENTED BY THE UNITED STATES DEPARTMENT OF COMMERCE, MARITIME ADMINISTRATION, HEREBY ACCEPTS THE ABOVE BID as amended by your telegram of February 27, 1968, with respect to the: SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, MONTANA, LAKELAND VICTORY, AND WISTERIA --

LUMP SUM AMOUNT OF $356,898.99

THIS AGREEMENT SHALL BE KNOWN AND IDENTIFIED AS CONTRACT NO. MA- 4497.

UNITED STATES OF AMERICA
BY: DEPARTMENT OF COMMERCE
MARITIME ADMINISTRATION

BY: [signature]
CHIEF, SHIP SALES AND DISPOSAL BRANCH
Division of Reserve Fleet

APPROVED AS TO FORM:

[signature]
ASSISTANT GENERAL COUNSEL
DIVISION OF CONSTRUCTION CONTRACTS

MAR000678

SCHN00016622

September 27, 1968

360(S)

AIRMAIL

Oregon Shipwreckers Inc.
5121 S. W. Moody Avenue
Portland, Oregon 97201

Gentlemen:

Subject: Performance Bond - $350,000 - Contract MA-4497 - PD-X-793 - SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, WISTERIA, LAKELAND VICTORY, and MONTANA

The subject Performance Bond secures the obligations of Oregon Shipwreckers, Inc. under Contract MA-4497, dated February 29, 1968, covering sale of seven ships including the SS RUFUS C. DAWES. The contract provides for reduction in the amount of the bond for each ship scrapped on the basis of $50,000 per ship. Previously the Performance Bond has been reduced by the amount of $100,000 due to the scrapping of two ships.

Based upon the additional certified evidence you currently presented to us, all the obligations and agreements set forth in Contract MA-4497 with respect to the SS RUFUS C. DAWES have now been performed and observed. Therefore, it is in order to further reduce the Performance Bond by the amount of $50,000 leaving a balance of $200,000 to secure the remaining obligations under the contract.

Sincerely yours,

A. M. Veltz
Acting Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

cc:
Zidell Explorations, Inc.
Zidell Machinery & Supply Co.
American Ship Dismantlers, Inc.
Messrs. Leonard, Morris, Manuel, and
Gilbert Schnitzer

cc:
360
360 (CP)
578
CWSchumacher/ro

MAR000679

SCHN00016623

ADDENDUM

Invitation No. PD-X-793, dated February 6, 1968

For the award of all three lots we submit an alternate bid in the lumpsum amount of $336,898.99.

OREGON SHIPWRECKERS, INC.

By _____
Emery Tidell - President

MAR000680

SCHN00016624

Invitation for Bids No. PD-X-793

Dated February 6, 1968

THE

UNITED STATES OF AMERICA

represented by

DEPARTMENT OF COMMERCE

MARITIME ADMINISTRATION

hereby invites sealed bids from United States citizens for the purchase of the ships described on the attached list, designated Schedule "A" and by this reference made a part hereof, upon the following condition:

> The Buyer shall, within twenty-four (24) months after the date of delivery, scrap the hulls of the ships, within the United States of America, unless the ships are lost at sea or otherwise destroyed,

upon the terms and conditions hereinafter set forth in "INFORMATION AND INSTRUCTIONS TO BIDDERS."

INFORMATION AND INSTRUCTIONS TO BIDDERS

I. Definitions. As used throughout this Invitation for Bids, the following terms shall have the meaning set forth below:

(A) The term "Administration" means the United States of America, represented by the Department of Commerce, Maritime Administration.

(B) The term "Contracting Officer" means that official of the Office of Ship Operations of the Administration who has been authorized to take or direct actions under the Invitation and/or Sales Contract in the name of the Administration.

(C) The term "Buyer" means the successful bidder for the purchase of the ships, as described on Schedule "A".

(D) The term "scrap" means to dismantle the hull and superstructures of a ship in such a manner that no considerable part of the material is left intact or undisturbed to the extent that it can be readily identified as an existing portion of the original hull or superstructure. This includes the removal from the ship (without replacement) of all hull, inner bottom, bulkhead, deck and deckhouse materials, as well as all floors, longitudinals, webs, girders and other framing. Any of the material or parts of the hull exported from the United States of America, however, shall be cut to, or smaller than, individual plate or structural size.

The foregoing does not preclude the reuse of any materials, parts, or assemblies for other than water transportation purposes, nor does it preclude the reuse of plates, structurals or minor assemblies (other than the keels and inner bottoms), in the construction, reconstruction, or repair of a vessel, as a "part" is so defined in Section 1 of the Shipping Act, 1916, as amended.

(E) The term "days" means calendar days

II. Bids Considered. (A) The ships covered by this Invitation are being offered in lots only: Lot 1 and Lot 2 will include two ships each and Lot 3 will include three ships, all as identified and described on Schedule "A" hereof. Bids on individual ships out of any of the lots will not be considered. Bids may be submitted on any or all of the three lots. If bids are submitted on more than one lot, the bidder must indicate the type of award it is willing to accept by placing an "X" or the appropriate number, as the case may be, in the proper space on the Form of Bid. In the absence of any indication, it will be assumed that the bidder is willing to accept an award of all or any of the lots on which bids are submitted. If bids are submitted on more than one lot and the bidder does not limit the award to "All Lots Only", no condition shall be imposed which deprives the Contracting Officer of the choice of the lots to be awarded in case of an award to the bidder of any one or more of the lots.

(B) Bidding is limited to United States citizens. By submittal of a bid, the bidder named therein certifies that he or it is a citizen of the United States of America within the meaning of and as defined in Section 2 of the Shipping Act, 1916, as amended. To the extent required by the Contracting Officer other statements and evidence relative to the citizenship of the bidder shall be furnished.

III. Location, Description, and Inspection of Ships. The ships are located and described as indicated on the aforesaid Schedule "A". Any description or other information furnished herein or otherwise concerning the ships is solely for the general information of bidders and its accuracy is not warranted. The ships may be inspected upon application to the party named in the aforesaid Schedule "A". All inspections shall be at the risk of the prospective bidders, and without liability to the United States or any department, agency, instrumentality, officer, agent, or employee thereof. Prospective bidders are cautioned to inspect the ships. Failure to inspect the ships or otherwise acquire full information as to their identity, physical condition, the risks and difficulties incident to the handling and movement of the ships after delivery, or otherwise, will give a bidder no right to withdraw any bid, no right to the return of any bid guaranty after the time fixed for the receipt of bids, or no right to rescind or to make any claims under any contract resulting from the acceptance of a bid.

IV. Form of Bid. Bids shall be submitted in triplicate in the form designated "Form of Bid", attached hereto. Erasures or other changes in the bid shall be explained or noted over the signature of the bidder. Each bid shall be complete and shall be duly executed in the name of the bidder by its proper officers or other persons authorized to execute and deliver the bid. The receipt of each and every addendum or amendment to this Invitation shall be acknowledged by appropriate notations in the spaces provided therefor in the Form of Bid. When requested by the Contracting Officer, satisfactory evidence of the authority of the officer signing on behalf of the bidder shall be furnished promptly. The Contracting Officer will not, after the time set for the receipt of bids, accept, either directly or indirectly, from bidders or from any person or persons acting for them, any communication or explanation, either oral or in writing, to explain or modify their bids in any way whatsoever, unless such communication or explanation is called for by the Contracting Officer.

V. Bid Guaranty. No bid will be considered unless it is accompanied by a guaranty satisfactory to the Contracting Officer in a sum equal to twenty-five (25) per cent of the amount of such bid to insure compliance with the terms of the bid. Bidders who submit bids on more than one lot of ships and who do not elect to furnish a guaranty bond, as provided below, should submit separate deposits in the amount required on each lot. However, if bids are submitted on more than one lot with a statement that only a limited number will be accepted, the deposit need not exceed twenty-five (25) per cent of the largest bids submitted within such limited number. If the Buyer fails either to make full

payment of the purchase price or to furnish the required performance bond, within the time specified therefor, the Buyer shall pay to the Contracting Officer, as liquidated damages and not as a penalty, an amount equal to the full amount of the guaranty applicable to the lots of ships with respect to which the Buyer is so in default. A bidder may, at its option, furnish as such guaranty either a guaranty bond in form and with surety or sureties satisfactory to the Administration or a certified or cashier's check. Guaranty bonds may be in the form of a United States corporate surety bond executed by a surety appearing on the United States Treasury Department list of acceptable sureties, or U. S. Government securities, or an irrevocable Letter of Credit issued by a United States citizen financial institution. In the case of a guaranty in the form of a guaranty bond, the bond shall contain the following condition: "NOW THEREFORE, if the Principal shall comply with all the terms and conditions of said bid, or in the event of failure to comply with all the terms and conditions of said bid, if the Principal shall pay to the Government an amount equal to the liquidated damages specified in the Invitation for Bids pursuant to which said bid was submitted, then the above obligation shall be null and void, otherwise to be and remain in full force and effect." Certified or cashier's checks furnished as guaranties shall be made payable to "MARITIME ADM-COMMERCE". The bid guaranty of unsuccessful bidders will be returned as soon as practicable after the Contracting Officer's action on the bids received.

VI. Identification and Opening of Bids. (A) Each bid shall be enclosed in a sealed envelope and marked:

"Bid for the Purchase of the Ship(s)_____
pursuant to:

(1) Invitation for Bids No. PD-X-(Bidder: Insert Number and Date)

(2) Addendum No._____dated_____"

(Listing the Invitation and any addenda by number and date)

and this envelope enclosed in another, marked "Bid Enclosed", and addressed to Secretary, Code 115, Maritime Administration, Washington, D. C. 20235. Bids will be received, publicly opened and read, at the times and places specified in the attached Schedule "A".

(B) The Secretary or his representative, the officer who will open the bids, will decide when the time for the receipt of bids has arrived, and no bid received thereafter will be considered, except that, when a bid or modification thereof arrives by certified or registered mail after the time fixed for the receipt of bids but before award is made and it is shown to the satisfaction of the Contracting Officer that the nonarrival on time was due solely to delay in the mails for which the bidder was not responsible, such bid may be received and considered. Telegraphic bids will not be considered, but modifications by telegraph of bids already submitted, including bids on lots of ships not previously bid upon, will be considered if received prior to the time fixed for the receipt of bids. No responsibility shall attach to a bid not properly addressed and identified. Telegraphic modifications received after the bid opening may be considered, if the Secretary determines that the late receipt of such modification was due solely to delay by the telegraph company. However, a late modification of an otherwise successful bid, whether by mail or telegram, shall be opened at the time it is received, and if in the judgement of the Contracting Officer it makes the terms of the bid more favorable to the Government it shall be considered.

VII. Withdrawal of Bids. A bid may be withdrawn on written or telegraphic request to the Secretary from the bidder prior to the time fixed for the receipt of bids but not thereafter. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after the time fixed for the receipt of bids.

VIII. Award and Rejection of Bids. The Contracting Officer reserves the right to reject any and all bids, call for new bids, waive any informality in any bid and make such award or awards as he may deem most advantageous, or will best serve the purposes and policy of the Merchant Marine Act, 1936, as amended, or other applicable law. Bids considered insufficient as to amounts offered, or otherwise, will be rejected.

IX. Terms of Sale. (A) Warranties. Each lot of ships is offered for sale "as is, where is," exclusive of leased or licensed equipment, lead and other metallic ballast covered by Section IX (F) hereof, if any, on board the ships, and also exclusive of Government property covered by Section IX (G) hereof, but without warranty, guaranty, or representation as to seaworthiness, condition, description, tonnage, or otherwise. However, the Bill of Sale conveying title to the Buyer will fully warrant title and freedom from all liens.

(B) Responsibility for Ships. The Buyer of the ships shall assume all the risks of ownership thereof from the time the Buyer receives notice of acceptance of its bid, and the Administration shall not thereafter be liable for any loss thereof or damage thereto either in whole or in part, nor will the Buyer be excused from performance or the purchase price be reduced by reason thereof.

(C) Payment of Purchase Price. The Buyer of the ships shall pay the full purchase price thereof in cash or by certified or cashier's check made payable to "MARITIME ADM-COMMERCE" on or before delivery thereof to the Buyer but in no event later than twenty (20) days from the date the Buyer receives notice of acceptance of its bid. In the absence of default by the Buyer in making payment of the full purchase price and furnishing the required performance bond, the bid guaranty of the Buyer, except in the case of a guaranty bond, shall be applied in partial payment of the purchase price.

(D) Delivery of Ships. (1) The Administration will make the ships available at their present location in the Astoria Reserve Fleet for delivery to the Buyer within five (5) days after receipt of written request therefor from the Buyer, provided, however, that the Administration shall not be liable for delay in making the ships available due to conditions beyond its control or conditions which by the exercise of reasonable diligence it was unable to prevent.

The ships will be delivered to the Buyer and the Buyer must accept delivery of such ships at their moored location within thirty (30) days from the date the Buyer receives notice of acceptance of its bid. The Buyer of the ships in Lot 1 and/or Lot 2 shall remove the ships purchased in each such Lot simultaneously in order to assure that the security of all ships is maintained. The Buyer of the ships in Lot 3 shall remove such ships in the sequence designated by the Fleet Superintendent and shall remove the last two of these ships simultaneously. It shall be the responsibility of the Buyer, at its own risk and expense and with its own labor and equipment, to unmoor and remove each ship purchased under the supervision and instructions of the Fleet Superintendent. This responsibility shall include the raising of anchors, the casting off of mooring lines, stowing of those lines belonging to the adjacent ship and removal of each ship purchased. Any mooring fenders attached to or secured to each ship delivered shall become the property of the Buyer and must be removed simultaneously with the ship. The Buyer shall also be responsible for providing transportation for persons engaged in its behalf to ready the ships for sea towing.

(2) If the Buyer fails or refuses to accept delivery within the time specified therefor, the actual damages to the Administration for the delay will be difficult of ascertainment and in lieu thereof the Buyer shall pay to the Contracting Officer as liquidated damages and not as a penalty, the sum of Fifty Dollars ($50) per day, or fraction thereof, of delay per ship, and the Buyer and its Surety shall be liable for the amount thereof, provided, however, that in the event of such default or failure of the Buyer in accepting delivery, the Contracting Officer shall also have the right, upon giving ten (10) days written notice to the Buyer, (a) to store the ships elsewhere for the account and at the risk and expense of the Buyer, or (b) to rescind the sale, or (c) to resell the ships for the account of the Buyer upon such terms and conditions as he may deem proper charging against the Buyer and its Surety in any of said cases (a), or (b), or (c) any excess costs occasioned the Administration thereby, together with any liquidated damages accrued on account of such default or failure. The exercise by the Contracting Officer of one or more of the rights herein specified will not preclude the Contracting Officer from exercising any other rights he may have against the Buyer.

(3) The Buyer of each lot of ships and its Surety shall be liable for any physical damage to the United States Government's property, and expenses incidental thereto, caused by and occurring during any part of the removal operations of the Buyer. The Buyer shall repair the damage, or have the damage repaired to the satisfaction of the Contracting Officer; or, the Buyer shall pay to the Contracting Officer an amount of money sufficient to cover the entire costs of the damage and all expense incident thereto, as determined by the Contracting Officer. The Contracting Officer shall have the sole and exclusive right to determine whether he will allow the Buyer to repair the damage or pay the Contracting Officer for such repairs as aforesaid.

(E) Scrapping of Hulls of Ships. (1) The sale of the ships shall be subject to the following conditions which form a substantial part of the consideration for the sale of the ships:

(a) The Buyer shall, within twenty-four (24) months after the date of delivery, scrap the hulls of the ships, within the United States of America, as "scrap" is defined in Section I (D), unless the ships are lost at sea or otherwise destroyed;

(b) The Buyer shall not at any time operate the ships, or cause or permit same to be operated, and shall not carry on the ships, or cause or permit to be carried on same, any cargo or passengers for its own account or for the account of others, or use the ships, or cause or permit same to be used for any commercial purpose whatsoever, while moving them from their present locations to the plants or yards at which the hulls are to be scrapped, or at any other time;

(c) Neither the ships, nor any parts thereof, shall be permitted to become a menace or obstruction to navigation either while being moved or while the hulls thereof are being scrapped as aforesaid, and in the event that the ships, or any parts thereof, shall at any time become a menace or obstruction to navigation, the Buyer shall, at its own cost and expense, remove the same forthwith, and upon its failure so to do the Contracting Officer may, through any agent or agencies he may designate, remove said menace or obstruction at the cost and expense of the Buyer and/or its Surety, but no obligation shall be imposed upon the Administration to remove same.

(2) In the event the Buyer is delayed in scrapping the hulls of the ships, in the manner aforesaid, and the Contracting Officer is satisfied that such delay has been caused by conditions beyond the control of the Buyer, or if the Contracting Officer is satisfied that such delay has been caused by conditions which by the exercise of reasonable diligence the Buyer was unable to prevent, then the Contracting Officer shall, by consent in writing, extend the time for scrapping same for such period as in the judgement of the Contracting Officer shall be just, reasonable and proper. The decision of the

Contracting Officer as to the existence of the cause or causes of such delay, and also as to the extension of time which shall be allowed, shall be final and conclusive upon the Buyer. Applications for extension of time shall be filed in writing with the Contracting Officer not later than sixty (60) days after the happening of the event causing the delay, unless the Contracting Officer shall extend the time in writing for the filing of such application.

(3) The obligations to be performed by the Buyer under the provisions of this Section II (E) and in the manner set forth are primary considerations for the sale of the ships, and time is of the essence in the performance of such obligations. The failure of the Buyer to perform any such obligations in the manner set forth and within the time specified therefor, or any extension thereof, will cause the Administration substantial damage, and the amount of such damage will be difficult of ascertainment. In order to protect itself against indefiniteness and uncertainty of liability, the Buyer agrees:

(a) In the event the Buyer shall at any time operate or use the ships, or cause or permit same to be operated or used, the Buyer shall pay to the Contracting Officer, as liquidated damages and not as a penalty, in addition to any other sum or sums payable hereunder, the sum of Five Hundred Dollars ($500.00) for each ship, for each day such ship is in operation or use;

(b) In the event the Buyer shall fail, neglect, or refuse to scrap the hulls of the ships in the manner herein provided and within the time herein specified, or any extension thereof, the Buyer shall pay to the Contracting Officer, as liquidated damages and not as a penalty, in addition to any other sum or sums payable hereunder, the sum of One Hundred Dollars ($100.00) for each ship, for each day the Buyer shall so be in default as to such ship, for a maximum of one hundred eighty (180) days;

(c) In the event the Buyer shall fail, neglect, or refuse to scrap the hulls of the ships in the manner herein provided and within the period of one hundred eighty (180) days specified in subsection (3) (b) above, then there shall be a total default, whereupon the Buyer shall pay to the Contracting Officer, as liquidated damages and not as a penalty, in addition to any other sum or sums payable hereunder, a lump sum amount of Twenty-five Thousand Dollars ($25,000.00) for each ship, which is not completely scrapped in the manner herein provided; and

(d) In the event the Buyer shall scrap the hulls of the ships outside the United States of America, the Buyer shall pay to the Contracting Officer as liquidated damages and not as a penalty, in addition to any other sum or sums payable hereunder, the sum of Fifty Thousand Dollars ($50,000.00) for each ship whose hull is scrapped outside the United States of America.

The payment of liquidated damages as herein provided, however, shall not prevent the Contracting Officer from terminating this contract as hereinafter provided. Neither shall such payment entitle the Buyer to operate or use the ships, or to cause or permit same to be operated or used, nor be a waiver of any of the obligations or agreements to be performed by the Buyer hereunder.

(4) In the event that:

(a) The Buyer shall operate the ships, or cause or permit same to be operated; or

(b) The Buyer shall carry on the ships, or cause or permit to be carried on same, any cargo or passengers for its own account or for the account of others, or use the ships, or cause or permit same to be used, for any commercial purpose whatsoever; or

(c) The Buyer shall cause or permit the ships, or any parts thereof, to become a menace or obstruction to navigation and not removed as aforesaid; or

(d) The Buyer shall fail, neglect or refuse to scrap the hulls of the ships in the manner herein provided, and within the time hereinabove specified; or

(e) The Buyer shall scrap the hulls of the ships outside the United States of America; or

(f) The Buyer shall fail to pay liquidated damages as herein provided;

taen, and upon the occurrence of any one or more of such events, the Contracting Officer may terminate this contract as to further performance by written notice to be served upon the Buyer either personally or by leaving said notice at the Buyer's principal office with the officer or agent in charge thereof, or by service upon the Master, if any, aboard any of the ships, and thereupon the Buyer shall cease to have any interest in the ships, or any parts thereof, not scrapped as herein provided, and shall cease to have any benefits from the further continuation of this contract. The Buyer agrees that such termination shall not release the Buyer and/or its Surety from the payment of liquidated damages, but that the Buyer and its Surety shall be liable to pay the liquidated damages that are due and payable, as herein provided, from the Buyer to the Contracting Officer at the time of service of the said written notice.

In the event this contract is terminated as to further performance, as above provided, the Buyer agrees that it will forthwith upon receipt of directions from the Contracting Officer surrender to the Contracting Officer the actual possession of the ships, or any parts thereof, not scrapped as herein provided, and deliver to the Contracting Officer a properly executed bill of sale for each such ship conveying the ship, or any parts thereof, not scrapped as herein provided, to the Administration with full warranty of title and freedom from all liens.

(F) Ballast. All lead and other metallic ballast of any kind (including metals capped or floored with concrete or readily separable therefrom but excluding metals intermixed with concrete) contained on the ships shall remain the property of the Administration and be removed from the ships purchased by the Buyer at the Buyer's own risk and expense. Upon such removal, the Buyer agrees to forthwith determine and certify to the Contracting Officer the amount and kind of all such ballast and, as determined by the Contracting Officer, either to purchase same from the Contracting Officer at the prevailing market value thereof, or to deliver same to the Government at a location on the scrapping site suitable for commercial loading and agreeable to the Contracting Officer. If no such ballast is on board, the Buyer shall furnish the Contracting Officer with a certificate to that effect.

In order to enable the Administration's representative or representatives to be present at the time of removal of any ballast covered by this Section IX (F), the Buyer shall give the Administration not less than forty-eight (48) hours advance notice of the removal of any such ballast. Such advance notice shall be directed to the Pacific Coast Director, Attention: Chief, Pacific Coast Branch, Division of Ship Repair and Maintenance, 450 Golden Gate Avenue, Box 36073, San Francisco, California 94102.

(G) Items Excluded from Sale. All rectifiers, rheostats, junction boxes, switches, and electric cable used in the Fleet's cathodic protective systems, and demountable crosswalks, if any, on board the ships, shall remain the property of the Administration. All such property will be removed from the ships by the Administration prior to delivery of any ship to a Buyer.

(H) Inspection. The Buyer shall permit the Administration or representatives thereof to inspect the ships purchased by it and the Buyer's operations in connection therewith at all reasonable times upon request, for such purpose as the Administration or representatives thereof may deem necessary or appropriate in order to determine or verify compliance by the Buyer with all applicable terms and conditions hereof.

(I) Performance Bond. The Buyer shall furnish to the Contracting Officer on or before delivery of the ships purchased by it, but in no event later than twenty (20) days from the date the Buyer receives notice of acceptance of its bid, its bond in a sum equal to Fifty Thousand Dollars ($50,000.00) for each ship purchased, in form and with Surety or Sureties satisfactory to and approved by the Contracting Officer, conditioned upon the faithful performance and observance of all the agreements, covenants, and conditions to be performed and observed by the Buyer hereunder. The Contracting Officer will consent to a reduction in the amount of said bond for each ship scrapped as herein required, on the basis of Fifty Thousand Dollars ($50,000.00) per ship, provided the Buyer shall not be in default in the performance and observance of any of the agreements, covenants and conditions to be performed and observed by the Buyer hereunder.

(J) Sale or Assignment. The Buyer shall neither sell nor assign any of its rights or obligations hereunder, nor resell any of the ships purchased by it, without the prior written consent of the Contracting Officer.

(K) Successors and Assigns. All the covenants, stipulations, and agreements herein contained are and shall be binding upon the respective heirs, administrators, executors, successors and assigns, if any, of the Buyer and of the Administration.

(L) Beneficiaries. No Member of or Delegate to Congress nor Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, except as provided in Sec. 110 of the Act approved March 4, 1909 (35 Stat. 1109). No Member of or Delegate to Congress nor Resident Commissioner shall be employed by the Buyer either with or without compensation, as an attorney, agent, officer or director (Sec. 805(e), Merchant Marine Act, 1936).

(M) Contingent Fees. The Buyer warrants that no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial agencies maintained by the Buyer for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or in its discretion to require the Buyer to pay, in addition to the contract price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

(N) Equal Opportunity. During the performance of this contract, the Buyer agrees as follows:

(1) The Buyer will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Buyer will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Buyer agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

(2) The Buyer will, in all solicitations or advertisements for employees placed by or on behalf of the Buyer, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(3) The Buyer will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the labor union or workers' representative of the Buyer's commitments under Section 202 of Executive Order No. 11246 of September 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Buyer will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Buyer will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Contracting Officer and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Buyer's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Buyer may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Buyer will include the provisions of Paragraphs (1) through (7) hereof in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Buyer will take such action with respect to any subcontract or purchase order as the Contracting Officer may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Buyer becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Contracting Officer, the Buyer may request the United States to enter into such litigation to protect the interests of the United States.

UNITED STATES OF AMERICA
By: DEPARTMENT OF COMMERCE
MARITIME ADMINISTRATION

By: M. C. Doty
Chief, Ship Sales and Disposal Branch
Division of Fleet and Facilities Management

USCOMM-MA-DC

SCHEDULE "A"
(Invitation for Bids No. PD-X-793)

NOTE (1): The ships listed in this Schedule will not be available for inspection on Saturdays, Sundays or Legal Holidays.

NOTE (2): Bids will be received until 2:30 p.m., Eastern Standard Time, February 27, 1968, by the Secretary, Maritime Administration. Bids will be publicly opened and read at 2:30 p.m., Eastern Standard Time, on said date at the offices of the Maritime Administration, Room 3857 , General Accounting Office Building, Washington, D. C.

NOTE (3): Prospective bidders shall arrange for any inspection of the ships not less than twenty-four (24) hours in advance of the anticipated arrival of the survey party at the Fleet site. Two trips only will be available each workday from the dock to the moored ships; one in the morning, returning in time for lunch and one in the afternoon, returning at the end of the workday.

NOTE (4): The ships listed in Lots 1 and 2 are Liberty ships, basic design EC2-S-C1, and have the following general design characteristics:

Dimensions: 417'8" x 56'10" x 37'4", Draft 27'8" (approx.)
Tonnages: Gross 7176, Net 4380, DWT 10,800 (approx.)
Propulsion: 3 Cyl. Triple Expansion - I.H.P. 2500

The following are the general design characteristics of the ships listed in Lot No. 3:

MONTANA: VC2-S-AP3 Victory ship, 436'6" x 62' x 38'; tonnages 7606 gross, 4549 net, 10,624 DWT and 15,199 displacement; 2 Cyl. steam turbine of 9350 SHP, single screw.

LAKELAND VICTORY: VC2-S-AP2 Victory ship, 436'6" x 62' x 38'; tonnages 7606 gross, 4563 net, 10,681 DWT and 15,199 displacement; 2 cyl. steam turbine of 6600 SHP, single screw.

WISTERIA: Ex-Army hospital ship of EC2-S-C1 (Liberty) basic design, 417'8" x 56'10" x 37'4"; 7191 gross and 4378 net tons, 3 cyl. reciprocating steam engine of 2500 HP, single screw.

Astoria, Oregon, Reserve Fleet

Lot No.	Ship	Official No.	Fuel Reported Aboard
1	(MARISCAL SUCRE	245,610	400 Bbls. Bunker "C"
	(WALTER COLTON	242,645	485 Bbls. Bunker "C"
2	(CAMPER	-	409 Bbls. Bunker "C"
	(RUFUS C. DAWES	244,237	65 Bbls. Bunker "C"
3	(MONTANA	247,478	519 Bbls. Bunker "C"
	(LAKELAND VICTORY	248,459	1074 Bbls. Bunker "C"
	(WISTERIA	243,065	Unknown

Some materials and equipment have reportedly been removed from the MONTANA and LAKELAND VICTORY and are not included in the sale of the ships.

For permission to inspect, apply to Mr. Stanley G. Johnson, Fleet Superintendent, Astoria Reserve Fleet, Route 2, Box 30, Astoria, Oregon 97103 (Telephone: 325-2611, Area Code 503).

Notwithstanding the provisions of Section IX (G) of the Invitation, all wooden demountable crosswalks, if any, aboard the above-listed ships will be included with the ships in the sale.

****

Explanatory Notes:

(1) All items of machinery, equipment and material (except leased or licensed equipment, excluded metallic ballast and Government property covered by Sections IX (F) and (G) of the Invitation), consumable stores and fuel, if any, on board are included with the ships in the sale and the value thereof will be considered included in the price bid for the ships.

(2) Ballast which is excluded from the sale by Section IX (A) of the Invitation and which is subject to the provisions of Section IX (F) thereof, includes, but without limitation otherwise, all metallic items or material, regardless of kind, used as ballast on the ships.

EACH BIDDER IS CAUTIONED AND URGED TO INSPECT THE SHIPS AND TO RELY SOLELY ON HIS OWN INSPECTION FOR THE PREPARATION OF HIS BID.

4-30-68

Zudell

What is Arnold's
last name —
see certificate of
execution for Zudell
Exploration Inc.
If you find out
write it in

AEN

FORM CD-121 (11-62) (PREV. ED. A.O. 208-10)

UNITED STATES GOVERNMENT

Memorandum

U.S. DEPARTMENT OF COMMERCE
MARITIME ADMINISTRATION
Washington, D. C. 20235

TO : Chief, Ship Sales and Disposal Branch

DATE: [illegible] '68

In reply refer to: 582

FROM : Chief, Division of External Audits
and Financial Analysis

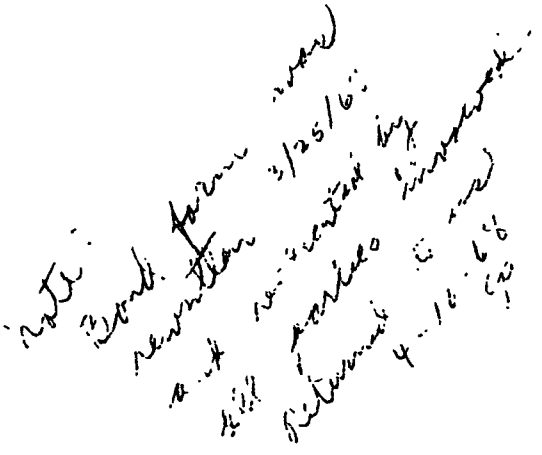
SUBJECT: PD-X-793 - Sale of Seven Ships for Scrapping - Contract MA-4497

Performance Bond executed February 29, 1968, by
Zidell Machinery & Supply Co.,
Zidell Explorations, Inc.,
American Ship Dismantlers, Inc., and
Leonard Schnitzer
in the amount of $350,000 to cover Contract MA-4497 for Oregon Shipwreckers, Inc., will be financially acceptable to this office, when it is supported by an Exhibit A to the Performance Bond properly executed by Morris Schnitzer, Manuel Schnitzer, and Gilbert Schnitzer as individual sureties. The performance bond and attachments are returned herewith.

B. W. Harvey

Enclosures

cc:
580
582-2



MAR000694

BUY U.S. SAVINGS BONDS REGULARLY ON THE PAYROLL SAVINGS PLAN

SCHN00016638

PERFORMANCE BOND

Invitation for Bids MD-I-793, dated February 6, 1968
Contract No. MA-4497, dated February 29, 1968
Number of Vessels Sold: Seven (7)
Principal: Oregon Shipwreckers, Inc.

WHEREAS, the United States of America, represented by the DEPARTMENT OF COMMERCE, acting by and through the MARITIME ADMINISTRATION sold to the OREGON SHIPWRECKERS, INC. seven (7) vessels identified as the SSs MARISCAL SUCRE, WALTER COLTON, SAMPEP, RUFUS C. DAWES, MONTANA, LAKELAND VICTORY and WISTERIA, hereinafter collectively referred to as the Vessels; and

WHEREAS, the aforesaid Vessels were sold to the OREGON SHIPWRECKERS, INC. pursuant to the terms and conditions of Invitation for Bids MD-I-793, dated February 6, 1968 and Contract No. MA-4497, dated February 29, 1968 which require that the Vessels be scrapped and that the OREGON SHIPWRECKERS, INC. furnish the Maritime Administration its bond in an aggregate amount of three hundred and fifty thousand dollars ($350,000.00), representing a sum of fifty thousand dollars ($50,000.00) for each Vessel, said bond to be in a form and with Sureties satisfactory to and approved by the Maritime Administration and conditioned upon the faithful performance and observance of all agreements, covenants and conditions to be performed and observed by the OREGON SHIPWRECKERS, INC.; and

WHEREAS, the OREGON SHIPWRECKERS, INC. as Principal, and the ZIDELL MACHINERY & SUPPLY CO., the ZIDELL EXPLORATIONS, INC., the AMERICAN SHIP DISMANTLERS, INC., and MESSRS. LEONARD, MORRIS, MANUEL and GILBERT SCHNITZER, jointly and severally, as Sureties, by this instrument furnish the Maritime Administration their undertaking and bond as follows:

KNOW ALL MEN BY THESE PRESENTS: That we, the PRINCIPAL and SURETIES, above named, are held and firmly bound unto the UNITED STATES OF AMERICA, represented by the DEPARTMENT OF COMMERCE, MARITIME ADMINISTRATION (hereinafter referred to as the "Obligee"), in the penal sum of three hundred and fifty thousand dollars ($350,000.00) lawful money of the United States, which sum shall be the maximum liability of the Sureties hereunder, for the payment of which sum well and truly to be made the said Principal and Sureties bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Obligee entered into an agreement with the Principal, as stated above, subject to the terms and conditions referred to in said agreement, which agreement has been exhibited to and examined by the Sureties and by this reference is made a part hereof to the same extent as though set out in full herein; and

WHEREAS, by the terms of said agreement, the Principal has agreed to furnish to the Obligee its bond in the aforementioned sum, with Sureties satisfactory to and approved by the Obligee, conditioned as hereinafter set forth.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall well, truly, faithfully, and fully perform and observe all the undertakings, covenants, terms, conditions and stipulations contained in the aforesaid agreement during the original term and any extensions thereof that may be granted by the Obligee, with or without notice to the Sureties, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said agreement that may hereafter be made, notice of which modifications to the Sureties being hereby waived, then this obligation shall be void; otherwise to be and remain in full force and effect.

This bond is executed by the Principal and Sureties and accepted by the Obligee under the following express agreements:

FIRST, the liability of the Sureties shall not be terminated, reduced, modified, released nor affected by any act or omission of the Obligee, any modification or alteration of any agreement above referred to, any forbearance on the part of the Obligee, nor any representation or inducement of any kind whatsoever, made to the Sureties, whether the same be true or not, nor by any other matter or thing, saving only the full and faithful performance of the condition of this bond by the Principal and/or the Sureties.

SECOND, that each and every default on the part of the Principal in the performance of the aforesaid condition of this bond shall, at the option of the Obligee, give rise to an immediate cause of action which shall, at the option of the Obligee, be separate and distinct from the causes of action arising upon defaults thereafter occurring, and bringing suit upon one or more of such causes of action, shall not prejudice nor bar the bringing of separate suits upon other causes of action whether theretofore or thereafter arising.

THIRD, as between the Principal and the Sureties, the Principal shall be primarily liable hereunder, but as between the Sureties and the Obligee, the Sureties shall be primarily liable on this bond; and, in the event of any default or failure on the part of the Principal in the performance of any of its obligations under the aforesaid agreement covered by this bond, and/or this bond, the Sureties shall forthwith be liable therefor, and it shall not be necessary for the Obligee to bring suit against the Principal or to give any notice to the Sureties, nor to take any other action before becoming entitled to bring suit against the Sureties. The Sureties hereby expressly waive notice from the Obligee of any default or failure whatsoever on the part of the Principal prior to the bringing of any suit against the Sureties on this bond.

IN WITNESS WHEREOF, the above bounden parties have caused these presents to be executed as of February 29, 1968, under their several seals, and as to corporations the name and corporate seal of each corporate party being hereto affixed and this instrument duly signed by their duly authorized representatives pursuant to authority of their governing body, and as to the partnership these presents being duly signed by a general partner on behalf of the partnership and as to the individual personal Sureties this instrument being duly signed in the presence of witnesses.

PRINCIPAL

ATTEST:

Secretary

OREGON SHIPWRECKERS, INC.

By

Corporate Seal

SURETIES

ATTEST:

Secretary

ZIDELL EXPLORATIONS, INC.

By Vice President

Corporate Seal

ATTEST:

Secretary

AMERICAN SHIP DISMANTLERS, INC.

By Vice President

Corporate Seal

ZIDELL MACHINERY & SUPPLY CO.
(Partnership)

Witness:

By
General Partner

Witness:

Leonard Schnitzer

Witness:

Morris Schnitzer

Witness:

Manuel Schnitzer

Witness:

Gilbert Schnitzer

Approved as to form:

Assistant General Counsel
Maritime Administration

MAR000697

SCHN00016641

CERTIFICATE OF EXECUTION

I, LEONARD SCHNITZER, certify that I am the SECRETARY of the OREGON SHIPWRECKERS, INC. named as the Principal in the within instrument, that EMERY ZIDELL who signed said instrument on behalf of the Principal was then PRESIDENT of said corporation, that I know his signature, and his signature thereto is genuine, and that said instrument was duly signed, sealed, and attested for and on behalf of said corporation by authority of its governing body.

Date: 4-5-68

(Title) SECRETARY

CERTIFICATE OF EXECUTION

I, ARNOLD [illegible], certify that I am the VICE PRESIDENT of the ZIDELL EXPLORATIONS, INC. named as Surety in the within instrument, that EMERY ZIDELL who signed said instrument on behalf of the Surety was then PRESIDENT of said corporation, that I know his signature, and his signature thereto is genuine, and that said instrument was duly signed, sealed, and attested for and on behalf of said corporation by authority of its governing body.

Date: 4-9-68

(Title) VICE-PRESIDENT

CERTIFICATE OF EXECUTION

I, Morris Schnitzer, certify that I am the President of the AMERICAN SHIP DISMANTLERS, INC. named as Surety in the within instrument, that Leonard Schnitzer who signed said instrument on behalf of the Surety was then Vice President of said corporation, that I know his signature, and his signature thereto is genuine, and that said instrument was duly signed, sealed, and attested for and on behalf of said corporation by authority of its governing body.

Date: 4/9/68

(Title) Vice President

MAR000698

SCHN00016642

BILL OF SALE

S. S. MARISCAL SUCRE

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE, that the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting by and through the MARITIME ADMINISTRATOR, the sole owner of the Ship hereinbelow more particularly identified, and having the general characteristics set forth hereinbelow as follows:

Name:	SS MARISCAL SUCRE
Official Number:	245,610
Basic Design:	EC2-S-C1
Year Built:	1944
Dimensions:	417'8" x 56'10" x 37'4", Draft 27'8" (approx.)
Tonnages:	Gross - 7176 Net - 4380
Propulsion:	3 Cyl. Triple Expansion - I.H.P. 2500
Where Located:	Astoria, Oregon, Reserve Fleet

Invitation for Bids No. PD-X- 793 dated	February 6, 1968
Contract No. MA- 4497 dated	February 29, 1968
Buyer:	Oregon Shipwreckers, Inc.
Street Address:	3121 S. W. Moody Avenue
City :	Portland, Oregon 97201
State of Incorporation:	Oregon

for and in consideration of the sum of Ten Dollars ($10.00), lawful money of the United States of America, to it in hand paid before the sealing and delivery of these presents by the above-named Buyer, and other good and valuable consideration, the receipt of both of which it does hereby acknowledge and is therewith fully satisfied, contented and paid, has bargained and sold, and by these presents does bargain and sell unto the Buyer, its successors and assigns, all the right, title and interest of the United States of America in and to the Ship, together with all her engines, boilers, masts, sails, boats, anchors, cables, tackle, furniture, and all other necessaries thereto appertaining and on board the Ship, but exclusive of leased or licensed equipment, if any, and exclusive of any other property or ballast, if any, as provided for in the above-identified Contract of Sale and Invitation for Bids;

TO HAVE AND TO HOLD the Ship and appurtenances thereunto belonging unto it, the said Buyer, its successors and assigns forever to the sole and only proper use, benefit, and behoof of the said Buyer and its successors and assigns, and the United States of America hereby expressly makes no warranty, guaranty, or representation as to seaworthiness, description, capacity, condition, tonnage, or otherwise concerning said Ship and appurtenances, except that the United States of America, represented as aforesaid, has promised, covenanted and agreed, and by these presents does hereby promise, covenant and agree for itself and assigns, to and with the said Buyer, its successors and assigns, to warrant and defend the title in and to the said Ship and all appurtenances against all and every person or persons whomsoever, and also warrants that the said Ship and appurtenances are free and clear of all liens and encumbrances;

TITLE to the aforesaid Ship is being transferred to the Buyer by this Bill of Sale pursuant to the terms and provisions of the Contract of Sale and Invitation for Bids, which provide, among other things, that the said Buyer shall, within twenty-four (24) months after date of delivery, scrap the hull of the Ship within the United States, and, that said Buyer shall not resell the Ship without the prior written consent of the United States of America, represented as aforesaid;

IN TESTIMONY WHEREOF, the UNITED STATES OF AMERICA, represented as aforesaid, has caused this BILL OF SALE to be signed, sealed and delivered this 27 day of May, 1968.

UNITED STATES OF AMERICA
By: SECRETARY OF COMMERCE
MARITIME ADMINISTRATOR

By: _____
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

APPROVED AS TO FORM:

_____
Assistant General Counsel
Maritime Administration

ACKNOWLEDGMENT

CITY OF WASHINGTON)
) SS:
DISTRICT OF COLUMBIA)

I, the undersigned, a Notary Public in and for the District of Columbia, do hereby certify that M. C. Doty who executed the foregoing Bill of Sale is personally well known to me to be the Chief, Ship Sales and Disposal Branch, Division of Reserve Fleet of the Maritime Administration, U. S. Department of Commerce: that he personally appeared before me in the said District of Columbia: that he is the person who executed the aforesaid Bill of Sale and acknowledged to me that he executed the same in his aforesaid official capacity: and that the same is the free and voluntary act and deed of the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting through the MARITIME ADMINISTRATOR, and of himself as said official of the MARITIME ADMINISTRATION, U. S. DEPARTMENT OF COMMERCE, for the uses and purposes expressed therein.

GIVEN under my hand and seal this 27 day of May, 1968.

_____
Notary Public

(SEAL)

USCOMM-MA-DC

BILL OF SALE

S. S. WALTER COLTON

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE, that the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting by and through the MARITIME ADMINISTRATOR, the sole owner of the Ship hereinbelow more particularly identified, and having the general characteristics set forth hereinbelow as follows:

Name:	SS WALTER COLTON
Official Number:	242,645
Basic Design:	EC2-S-C1
Year Built:	1942
Dimensions:	417'8" x 56'10" x 37'4", Draft 27'8" (approx.)
Tonnages:	Gross - 7176 Net - 4580
Propulsion:	3 Cyl. Triple Expansion - I.H.P. 2500
Where Located:	Astoria, Oregon, Reserve Fleet

Invitation for Bids No. MA-X- 793 dated	February 6, 1968
Contract No. MA- 4497 dated	February 29, 1968
Buyer:	Oregon Shipwreckers, Inc.
Street Address:	3121 S. W. Moody Avenue
City :	Portland, Oregon 97201
State of Incorporation:	Oregon

for and in consideration of the sum of Ten Dollars ($10.00), lawful money of the United States of America, to it in hand paid before the sealing and delivery of these presents by the above-named Buyer, and other good and valuable consideration, the receipt of both of which it does hereby acknowledge and is therewith fully satisfied, contented and paid, has bargained and sold, and by these presents does bargain and sell unto the Buyer, its successors and assigns, all the right, title and interest of the United States of America in and to the Ship, together with all her engines, boilers, masts, sails, boats, anchors, cables, tackle, furniture, and all other necessaries thereto appertaining and on board the Ship, but exclusive of leased or licensed equipment, if any, and exclusive of any other property or ballast, if any, as provided for in the above-identified Contract of Sale and Invitation for Bids;

TO HAVE AND TO HOLD the Ship and appurtenances thereunto belonging unto it, the said Buyer, its successors and assigns forever to the sole and only proper use, benefit, and behoof of the said Buyer and its successors and assigns, and the United States of America hereby expressly makes no warranty, guaranty, or representation as to seaworthiness, description, capacity, condition, tonnage, or otherwise concerning said Ship and appurtenances, except that the United States of America, represented as aforesaid, has promised, covenanted and agreed, and by these presents does hereby promise, covenant and agree for itself and assigns, to and with the said Buyer, its successors and assigns, to warrant and defend the title in and to the said Ship and all appurtenances against all and every person or persons whomsoever, and also warrants that the said Ship and appurtenances are free and clear of all liens and encumbrances;

TITLE to the aforesaid Ship is being transferred to the Buyer by this Bill of Sale pursuant to the terms and provisions of the Contract of Sale and Invitation for Bids, which provide, among other things, that the said Buyer shall, within twenty-four (24) months after date of delivery, scrap the hull of the Ship within the United States, and, that said Buyer shall not resell the Ship without the prior written consent of the United States of America, represented as aforesaid;

IN TESTIMONY WHEREOF, the UNITED STATES OF AMERICA, represented as aforesaid, has caused this BILL OF SALE to be signed, sealed and delivered this 21st day of May, 1968.

UNITED STATES OF AMERICA
By: SECRETARY OF COMMERCE
MARITIME ADMINISTRATOR

By: _____
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

APPROVED AS TO FORM:

_____
Assistant General Counsel
Maritime Administration

ACKNOWLEDGEMENT

CITY OF WASHINGTON)
) SS:
DISTRICT OF COLUMBIA)

I, the undersigned, a Notary Public in and for the District of Columbia, do hereby certify that M. C. Doty who executed the foregoing Bill of Sale is personally well known to me to be the Chief, Ship Sales and Disposal Branch, Division of Reserve Fleet of the Maritime Administration, U. S. Department of Commerce: that he personally appeared before me in the said District of Columbia; that he is the person who executed the aforesaid Bill of Sale and acknowledged to me that he executed the same in his aforesaid official capacity: and that the same is the free and voluntary act and deed of the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting through the MARITIME ADMINISTRATOR, and of himself as said official of the MARITIME ADMINISTRATION, U. S. DEPARTMENT OF COMMERCE, for the uses and purposes expressed therein.

GIVEN under my hand and seal this 21st day of May, 1968.

_____
Notary Public
My commission expires April 14, 1969

(SEAL)

USCOMM-MA-DC

BILL OF SALE

S. S. SAMPEP

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE, that the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting by and through the MARITIME ADMINISTRATOR, the sole owner of the Ship hereinbelow more particularly identified, and having the general characteristics set forth hereinbelow as follows:

Name:	SS SAMPEP
Official Number:	—
Basic Design:	EC2-S-C1
Year Built:	1943
Dimensions:	417'8" x 56'10" x 37'4", Draft 27'8" (approx.)
Tonnages:	Gross - 7176 Net - 4380
Propulsion:	3 Cyl. Triple Expansion - I.H.P. 2500
Where Located:	Astoria, Oregon, Reserve Fleet

Invitation for Bids No. PD-X- 793	dated February 6, 1968
Contract No. MA- 4497 dated	February 29, 1968
Buyer:	Oregon Shipwreckers, Inc.
Street Address:	3121 S. W. Moody Avenue
City :	Portland, Oregon 97201
State of Incorporation:	Oregon

for and in consideration of the sum of Ten Dollars ($10.00), lawful money of the United States of America, to it in hand paid before the sealing and delivery of these presents by the above-named Buyer, and other good and valuable consideration, the receipt of both of which it does hereby acknowledge and is therewith fully satisfied, contented and paid, has bargained and sold, and by these presents does bargain and sell unto the Buyer, its successors and assigns, all the right, title and interest of the United States of America in and to the Ship, together with all her engines, boilers, masts, sails, boats, anchors, cables, tackle, furniture, and all other necessaries thereto appertaining and on board the Ship, but exclusive of leased or licensed equipment, if any, and exclusive of any other property or ballast, if any, as provided for in the above-identified Contract of Sale and Invitation for Bids;

TO HAVE AND TO HOLD the Ship and appurtenances thereunto belonging unto it, the said Buyer, its successors and assigns forever to the sole and only proper use, benefit, and behoof of the said Buyer and its successors and assigns, and the United States of America hereby expressly makes no warranty, guaranty, or representation as to seaworthiness, description, capacity, condition, tonnage, or otherwise concerning said Ship and appurtenances, except that the United States of America, represented as aforesaid, has promised, covenanted and agreed, and by these presents does hereby promise, covenant and agree for itself and assigns, to and with the said Buyer, its successors and assigns, to warrant and defend the title in and to the said Ship and all appurtenances against all and every person or persons whomsoever, and also warrants that the said Ship and appurtenances are free and clear of all liens and encumbrances;

TITLE to the aforesaid Ship is being transferred to the Buyer by this Bill of Sale pursuant to the terms and provisions of the Contract of Sale and Invitation for Bids, which provide, among other things, that the said Buyer shall, within twenty-four (24) months after date of delivery, scrap the hull of the Ship within the United States, and, that said Buyer shall not resell the Ship without the prior written consent of the United States of America, represented as aforesaid;

IN TESTIMONY WHEREOF, the UNITED STATES OF AMERICA, represented as aforesaid, has caused this BILL OF SALE to be signed, sealed and delivered this 1st day of May, 1968.

UNITED STATES OF AMERICA
By: SECRETARY OF COMMERCE
MARITIME ADMINISTRATOR

By: _____
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

APPROVED AS TO FORM:

_____
Assistant General Counsel
Maritime Administration

a Notarization

ACKNOWLEDGEMENT

CITY OF WASHINGTON)
) SS:
DISTRICT OF COLUMBIA)

I, the undersigned, a Notary Public in and for the District of Columbia, do hereby certify that M. C. Doty who executed the foregoing Bill of Sale is personally well known to me to be the Chief, Ship Sales and Disposal Branch, Division of Reserve Fleet of the Maritime Administration, U. S. Department of Commerce: that he personally appeared before me in the said District of Columbia: that he is the person who executed the aforesaid Bill of Sale and acknowledged to me that he executed the same in his aforesaid official capacity: and that the same is the free and voluntary act and deed of the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting through the MARITIME ADMINISTRATOR, and of himself as said official of the MARITIME ADMINISTRATION, U. S. DEPARTMENT OF COMMERCE, for the uses and purposes expressed therein.

GIVEN under my hand and seal this 1st day of May, 1968.

_____
Notary Public

My commission expires April 14, 1968

(SEAL)

USCOMM-MA-DC

BILL OF SALE

S. S. RUFUS C. DAWES

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE, that the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting by and through the MARITIME ADMINISTRATOR, the sole owner of the Ship hereinbelow more particularly identified, and having the general characteristics set forth hereinbelow as follows:

Name:	SS RUFUS C. DAWES
Official Number:	244,237
Basic Design:	EC2-S-C1
Year Built:	1943
Dimensions:	417'8" x 56'10" x 37'4", Draft 27'8" (approx.)
Tonnages:	Gross - 7176 Net - 4380
Propulsion:	3 Cyl. Triple Expansion - I.H.P. 2500
Where Located:	Astoria, Oregon, Reserve Fleet

Invitation for Bids No. PD-X- 793 dated	February 6, 1968
Contract No. MA- 4497 dated	February 29, 1968
Buyer:	Oregon Shipwreckers, Inc.
Street Address:	3121 S. W. Moody Avenue
City :	Portland, Oregon 97201
State of Incorporation:	Oregon

for and in consideration of the sum of Ten Dollars ($10.00), lawful money of the United States of America, to it in hand paid before the sealing and delivery of these presents by the above-named Buyer, and other good and valuable consideration, the receipt of both of which it does hereby acknowledge and is therewith fully satisfied, contented and paid, has bargained and sold, and by these presents does bargain and sell unto the Buyer, its successors and assigns, all the right, title and interest of the United States of America in and to the Ship, together with all her engines, boilers, masts, sails, boats, anchors, cables, tackle, furniture, and all other necessaries thereto appertaining and on board the Ship, but exclusive of leased or licensed equipment, if any, and exclusive of any other property or ballast, if any, as provided for in the above-identified Contract of Sale and Invitation for Bids;

TO HAVE AND TO HOLD the Ship and appurtenances thereunto belonging unto it, the said Buyer, its successors and assigns forever to the sole and only proper use, benefit, and behoof of the said Buyer and its successors and assigns, and the United States of America hereby expressly makes no warranty, guaranty, or representation as to seaworthiness, description, capacity, condition, tonnage, or otherwise concerning said Ship and appurtenances, except that the United States of America, represented as aforesaid, has promised, covenanted and agreed, and by these presents does hereby promise, covenant and agree for itself and assigns, to and with the said Buyer, its successors and assigns, to warrant and defend the title in and to the said Ship and all appurtenances against all and every person or persons whomsoever, and also warrants that the said Ship and appurtenances are free and clear of all liens and encumbrances;

TITLE to the aforesaid Ship is being transferred to the Buyer by this Bill of Sale pursuant to the terms and provisions of the Contract of Sale and Invitation for Bids, which provide, among other things, that the said Buyer shall, within twenty-four (24) months after date of delivery, scrap the hull of the Ship within the United States, and, that said Buyer shall not resell the Ship without the prior written consent of the United States of America, represented as aforesaid;

IN TESTIMONY WHEREOF, the UNITED STATES OF AMERICA, represented as aforesaid, has caused this BILL OF SALE to be signed, sealed and delivered this 1st day of May, 1968.

UNITED STATES OF AMERICA
By: SECRETARY OF COMMERCE
MARITIME ADMINISTRATOR

By: _____
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

APPROVED AS TO FORM:

_____
Assistant General Counsel
Maritime Administration

ACKNOWLEDGMENT

CITY OF WASHINGTON)
) SS:
DISTRICT OF COLUMBIA)

I, the undersigned, a Notary Public in and for the District of Columbia, do hereby certify that M. C. Doty who executed the foregoing Bill of Sale is personally well known to me to be the Chief, Ship Sales and Disposal Branch, Division of Reserve Fleet of the Maritime Administration, U. S. Department of Commerce: that he personally appeared before me in the said District of Columbia; that he is the person who executed the aforesaid Bill of Sale and acknowledged to me that he executed the same in his aforesaid official capacity: and that the same is the free and voluntary act and deed of the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting through the MARITIME ADMINISTRATOR, and of himself as said official of the MARITIME ADMINISTRATION, U. S. DEPARTMENT OF COMMERCE, for the uses and purposes expressed therein.

GIVEN under my hand and seal this 1st day of May, 1968.

_____
Notary Public

My commission expires August 14 1968

(SEAL)

USCOMM-MA-DC

BILL OF SALE

S. S. MONTANA

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE, that the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting by and through the MARITIME ADMINISTRATOR, the sole owner of the Ship hereinbelow more particularly identified, and having the general characteristics set forth hereinbelow as follows:

Name:	SS MONTANA
Official Number:	247,478
Basic Design:	VC2-S-AP3 Victory
Year Built:	1945
Dimensions:	436'6" x 62' x 38'
Tonnages:	Gross - 7606 Net - 4549
Propulsion:	2 Cyl. Steam Turbine - 9350 SHP
Where Located:	Astoria, Oregon, Reserve Fleet

Invitation for Bids No. PD-X- 793 dated	February 6, 1968
Contract No. MA- 4497 dated	February 29, 1968
Buyer:	Oregon Shipwreckers, Inc.
Street Address:	3121 S. W. Moody Avenue
City :	Portland, Oregon 97201
State of Incorporation:	Oregon

for and in consideration of the sum of Ten Dollars ($10.00), lawful money of the United States of America, to it in hand paid before the sealing and delivery of these presents by the above-named Buyer, and other good and valuable consideration, the receipt of both of which it does hereby acknowledge and is therewith fully satisfied, contented and paid, has bargained and sold, and by these presents does bargain and sell unto the Buyer, its successors and assigns, all the right, title and interest of the United States of America in and to the Ship, together with all her engines, boilers, masts, sails, boats, anchors, cables, tackle, furniture, and all other necessaries thereto appertaining and on board the Ship, but exclusive of leased or licensed equipment, if any, and exclusive of any other property or ballast, if any, as provided for in the above-identified Contract of Sale and Invitation for Bids;

TO HAVE AND TO HOLD the Ship and appurtenances thereunto belonging unto it, the said Buyer, its successors and assigns forever to the sole and only proper use, benefit, and behoof of the said Buyer and its successors and assigns, and the United States of America hereby expressly makes no warranty, guaranty, or representation as to seaworthiness, description, capacity, condition, tonnage, or otherwise concerning said Ship and appurtenances, except that the United States of America, represented as aforesaid, has promised, covenanted and agreed, and by these presents does hereby promise, covenant and agree for itself and assigns, to and with the said Buyer, its successors and assigns, to warrant and defend the title in and to the said Ship and all appurtenances against all and every person or persons whomsoever, and also warrants that the said Ship and appurtenances are free and clear of all liens and encumbrances;

TITLE to the aforesaid Ship is being transferred to the Buyer by this Bill of Sale pursuant to the terms and provisions of the Contract of Sale and Invitation for Bids, which provide, among other things, that the said Buyer shall, within twenty-four (24) months after date of delivery, scrap the hull of the Ship within the United States, and, that said Buyer shall not resell the Ship without the prior written consent of the United States of America, represented as aforesaid;

IN TESTIMONY WHEREOF, the UNITED STATES OF AMERICA, represented as aforesaid, has caused this BILL OF SALE to be signed, sealed and delivered this 1st day of May, 1968.

UNITED STATES OF AMERICA
By: SECRETARY OF COMMERCE
MARITIME ADMINISTRATOR

By: _____
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

APPROVED AS TO FORM:

_____
Assistant General Counsel
Maritime Administration

ACKNOWLEDGEMENT

CITY OF WASHINGTON)
) SS:
DISTRICT OF COLUMBIA)

I, the undersigned, a Notary Public in and for the District of Columbia, do hereby certify that M. C. Doty who executed the foregoing Bill of Sale is personally well known to me to be the Chief, Ship Sales and Disposal Branch, Division of Reserve Fleet of the Maritime Administration, U. S. Department of Commerce: that he personally appeared before me in the said District of Columbia; that he is the person who executed the aforesaid Bill of Sale and acknowledged to me that he executed the same in his aforesaid official capacity: and that the same is the free and voluntary act and deed of the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting through the MARITIME ADMINISTRATOR, and of himself as said official of the MARITIME ADMINISTRATION, U. S. DEPARTMENT OF COMMERCE, for the uses and purposes expressed therein.

GIVEN under my hand and seal this 1st day of May, 1968.

_____
Notary Public
My Commission Expires April 14, 1969

(SEAL)

USCOMM-MA-DC

BILL OF SALE

S. S. LAKELAND VICTORY

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE, that the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting by and through the MARITIME ADMINISTRATOR, the sole owner of the Ship hereinbelow more particularly identified, and having the general characteristics set forth hereinbelow as follows:

Name:	SS LAKELAND VICTORY
Official Number:	248,459
Basic Design:	VC2-S-AP2 Victory
Year Built:	1945
Dimensions:	436'6" x 62' x 38'
Tonnages:	Gross - 7606 Net - 4563
Propulsion:	2 Cyl. Steam Turbine - 6600 SHP
Where Located:	Astoria, Oregon, Reserve Fleet

Invitation for Bids No. PD-X- 795	dated February 6, 1968
Contract No. MA- 4497 dated	February 29, 1968
Buyer:	Oregon Shipwreckers, Inc.
Street Address:	5121 S. W. Moody Avenue
City :	Portland, Oregon 97201
State of Incorporation:	Oregon

for and in consideration of the sum of Ten Dollars ($10.00), lawful money of the United States of America, to it in hand paid before the sealing and delivery of these presents by the above-named Buyer, and other good and valuable consideration, the receipt of both of which it does hereby acknowledge and is therewith fully satisfied, contented and paid, has bargained and sold, and by these presents does bargain and sell unto the Buyer, its successors and assigns, all the right, title and interest of the United States of America in and to the Ship, together with all her engines, boilers, masts, sails, boats, anchors, cables, tackle, furniture, and all other necessaries thereto appertaining and on board the Ship, but exclusive of leased or licensed equipment, if any, and exclusive of any other property or ballast, if any, as provided for in the above-identified Contract of Sale and Invitation for Bids;

TO HAVE AND TO HOLD the Ship and appurtenances thereunto belonging unto it, the said Buyer, its successors and assigns forever to the sole and only proper use, benefit, and behoof of the said Buyer and its successors and assigns, and the United States of America hereby expressly makes no warranty, guaranty, or representation as to seaworthiness, description, capacity, condition, tonnage, or otherwise concerning said Ship and appurtenances, except that the United States of America, represented as aforesaid, has promised, covenanted and agreed, and by these presents does hereby promise, covenant and agree for itself and assigns, to and with the said Buyer, its successors and assigns, to warrant and defend the title in and to the said Ship and all appurtenances against all and every person or persons whomsoever, and also warrants that the said Ship and appurtenances are free and clear of all liens and encumbrances;

TITLE to the aforesaid Ship is being transferred to the Buyer by this Bill of Sale pursuant to the terms and provisions of the Contract of Sale and Invitation for Bids, which provide, among other things, that the said Buyer shall, within twenty-four (24) months after date of delivery, scrap the hull of the Ship within the United States, and, that said Buyer shall not resell the Ship without the prior written consent of the United States of America, represented as aforesaid;

IN TESTIMONY WHEREOF, the UNITED STATES OF AMERICA, represented as aforesaid, has caused this BILL OF SALE to be signed, sealed and delivered this 1st day of May 1968.

UNITED STATES OF AMERICA
By: SECRETARY OF COMMERCE
MARITIME ADMINISTRATOR

By: _____
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

APPROVED AS TO FORM:

_____
Assistant General Counsel
Maritime Administration

ACKNOWLEDGEMENT

CITY OF WASHINGTON)
) SS:
DISTRICT OF COLUMBIA)

I, the undersigned, a Notary Public in and for the District of Columbia, do hereby certify that M. C. Doty who executed the foregoing Bill of Sale is personally well known to me to be the Chief, Ship Sales and Disposal Branch, Division of Reserve Fleet of the Maritime Administration, U. S. Department of Commerce; that he personally appeared before me in the said District of Columbia; that he is the person who executed the aforesaid Bill of Sale and acknowledged to me that he executed the same in his aforesaid official capacity; and that the same is the free and voluntary act and deed of the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting through the MARITIME ADMINISTRATOR, and of himself as said official of the MARITIME ADMINISTRATION, U. S. DEPARTMENT OF COMMERCE, for the uses and purposes expressed therein.

GIVEN under my hand and seal this 1st day of May, 1968.

_____
Notary Public

My Commission Expires April 14, 1969

(SEAL)

USCOMM-MA-DC

MAR000710

SCHN00016654

BILL OF SALE

S. S. WISTERIA

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE, that the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting by and through the MARITIME ADMINISTRATOR, the sole owner of the Ship hereinbelow more particularly identified, and having the general characteristics set forth hereinbelow as follows:

Name:	SS WISTERIA
Official Number:	243,065
Basic Design:	EC2-S-C1
Year Built:	1943
Dimensions:	417'8" x 56'10" x 37'4"
Tonnages:	Gross - 7191 Net - 4378
Propulsion:	3 Cyl. Reciprocating Steam Engine - 2500 HP
Where Located:	Astoria, Oregon, Reserve Fleet

Invitation for Bids No. PD-X- 793	dated February 6, 1968
Contract No. MA- 4497 dated	February 29, 1968
Buyer:	Oregon Shipwreckers, Inc.
Street Address:	3121 S. W. Moody Avenue
City :	Portland, Oregon 97201
State of Incorporation:	Oregon

for and in consideration of the sum of Ten Dollars ($10.00), lawful money of the United States of America, to it in hand paid before the sealing and delivery of these presents by the above-named Buyer, and other good and valuable consideration, the receipt of both of which it does hereby acknowledge and is therewith fully satisfied, contented and paid, has bargained and sold, and by these presents does bargain and sell unto the Buyer, its successors and assigns, all the right, title and interest of the United States of America in and to the Ship, together with all her engines, boilers, masts, sails, boats, anchors, cables, tackle, furniture, and all other necessaries thereto appertaining and on board the Ship, but exclusive of leased or licensed equipment, if any, and exclusive of any other property or ballast, if any, as provided for in the above-identified Contract of Sale and Invitation for Bids;

TO HAVE AND TO HOLD the Ship and appurtenances thereunto belonging unto it, the said Buyer, its successors and assigns forever to the sole and only proper use, benefit, and behoof of the said Buyer and its successors and assigns, and the United States of America hereby expressly makes no warranty, guaranty, or representation as to seaworthiness, description, capacity, condition, tonnage, or otherwise concerning said Ship and appurtenances, except that the United States of America, represented as aforesaid, has promised, covenanted and agreed, and by these presents does hereby promise, covenant and agree for itself and assigns, to and with the said Buyer, its successors and assigns, to warrant and defend the title in and to the said Ship and all appurtenances against all and every person or persons whomsoever, and also warrants that the said Ship and appurtenances are free and clear of all liens and encumbrances;

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IN TESTIMONY WHEREOF, the UNITED STATES OF AMERICA, represented as aforesaid, has caused this BILL OF SALE to be signed, sealed and delivered this 1st day of May, 1968.

UNITED STATES OF AMERICA
By: SECRETARY OF COMMERCE
MARITIME ADMINISTRATOR

By: _____
Chief, Ship Sales and Disposal Branch
Division of Reserve Fleet

APPROVED AS TO FORM:

John F Harrell
Assistant General Counsel
Maritime Administration

ACKNOWLEDGEMENT

CITY OF WASHINGTON)
) SS:
DISTRICT OF COLUMBIA)

I, the undersigned, a Notary Public in and for the District of Columbia, do hereby certify that M. C. Doty who executed the foregoing Bill of Sale is personally well known to me to be the Chief, Ship Sales and Disposal Branch, Division of Reserve Fleet of the Maritime Administration, U. S. Department of Commerce: that he personally appeared before me in the said District of Columbia; that he is the person who executed the aforesaid Bill of Sale and acknowledged to me that he executed the same in his aforesaid official capacity: and that the same is the free and voluntary act and deed of the UNITED STATES OF AMERICA, represented by the SECRETARY OF COMMERCE, acting through the MARITIME ADMINISTRATOR, and of himself as said official of the MARITIME ADMINISTRATION, U. S. DEPARTMENT OF COMMERCE, for the uses and purposes expressed therein.

GIVEN under my hand and seal this 1st day of May, 1968.

Anne M. Manning
Notary Public

My Commission Expires April 14, 1969

(SEAL)

USCOMM-MA-DC